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BUSINESS GOING ON AS USUAL.



# TEACHER TRAINING THRU SERVICE

Chas. A. Wagner, Chester, Pa.

The training of the teacher before service and the training of the teacher by and thru service, as stated heretofore in the *SCHOOL BOARD JOURNAL*,\* are two quite different processes. Acquisition, acceptance upon authority, assimilation of ideas, characterizes the training before service. Acquisition, critical consideration, adaptation, trial, improvement by trial, must characterize the training thru service. Is such training thru service valuable, is it as valuable as summer school attendance or as post-graduate work? This question is entitled to an answer.

The training of the teacher before service necessarily has in mind the development of a capacity, perhaps of a habit, of continued growth after the student leaves the training school. All teachers who comprehend the real essence of growth by teaching have such a desire and such a hope. Probably, however, the fact of graduation, of completion of a training school course, sets up in many young teachers the more or less complacent attitude that now the art has been learned, now complete application of what has been learned is the rather easy task that remains. Every graduate from a training school should have the process for independent development and verification of teaching devices certainly started, but he also needs to comprehend clearly that the training school course is not the real beginning of the work; it is the beginning of "how to work."

## Learning and Observing.

Before service the teacher learned, listened to lectures or discussions, attended group conferences to get ideas and different points of view, and then observed an experienced teacher, perhaps a model or critic teacher, carry out or apply the idea; thereafter the "observer" attended a further conference for the discussion and comparison of plan and achievement. If wisely directed, the "observer" may have noted discrepancies between plan and *working* of the plan, between results secured and aims stated in the plan. Such discrimination marks a close and careful observer. The "observer" is never quite sure, however, whether the failure to attain projected aims and ends is due to the plan or to the teacher who tried to apply it, and from the safety and security of the seat of the "observer" may feel that she saw the mistake and could have avoided it.

## Learning and Observing One's Self.

When the teacher enters the real service, the critic teacher is absent, the group conference before teaching to discuss the plan is impossible. Instead, the teacher uses her idea of method or device, prepares a plan, alone and as best she can, tries out her plan and discovers two serious but different sets of shortcomings; one set with the plan and its failure to fit all the conditions, the other with the teacher, by reason of inability to command resources and devices to meet the unexpected needs. The situation is entirely different because the teacher sees the procedure from an entirely different point of view.

## Phases of Self-Observation.

Instead of the ready and almost unquestioned acceptance upon authority the teacher now passes thru a set or series of mental stages:

1. A questioning and probably partial acceptance of the method or device.
2. Adaptation of the device to the teachers' school and circumstances.
3. Schoolroom trial of the adaptation.
4. Critical examination of results of the trial.

5. Correction and improvement of the plan; retrial.
6. Readaptation and recorection.
7. Acceptance upon verification and adaptation.

8. Teacher now not an imitator only, but a true creator.

## The Process Elaborated by Stages:

1. The teacher in service may hear an idea at an institute, or may learn about it from a book or a magazine, or it may be suggested by a supervisor. Study to comprehend fully and clearly is a first necessity. Good training in the training school will be sure to have made the teacher a careful and thorough student. Then the teacher begins to plan her use of the idea if study has brought a conviction of merit. The schoolroom, the pupils, the program, are all kept in mind, and a plan suited to school, teacher and pupils is prepared. Many times these new ideas and plans must also be fitted to forms of procedure already in use. Set up an expectancy of success for the new plan, if a beginning teacher, but also leave a margin of expectancy for non-realization of aims and ends. A set of mind to guard against depression by failure and against exultation for success is a practical and philosophical necessity; experience is the only method for development of this temper.

2. A carefully prepared written lesson plan, showing step by step what procedure is planned, should then be put into shape. Leave copious space on the paper to record notes and observations, suggestions and questions, after-thoughts. These after-thoughts of your plan this year will in most cases become your "provisions," your anticipation of difficulty in the revised plan for subsequent revisions and improvements of the plan.

Now commit the plan to memory well enough so that you can follow it in operation by not more help than an occasional reference to the paper. Have the steps definitely in mind. They must, of course, mark real stages in the development of the thought, and not be mere arbitrary divisions to conform with the suggestions of steps. After the careful commitment of aims, steps, results, the teacher is ready to try the plan.

3. As the trial proceeds, if the paper is at hand, it may be wise to mark on the paper places where certain notes need to be inserted during the stage of appraisal of results.

4. Next, results must be appraised by the teacher. A system of marks such as "worked," "make more complete," "failed," will help to check the plan quickly while marking each step as laid out. All suggestions, improvements, omissions, may be marked in colored ink or pencil, to render very conspicuous, and to indicate the parts learned by experience. Unanticipated results are just as valuable to note as anticipated results.

5. Now, mediate the plan and the additions and criticism. Here belong the consultation of the principal and the supervisor or the critic teacher, if possible. Compare with books and magazines, with your own former plans in other lessons that use the same principles, invite the criticisms of other teachers, get a critical and comparative view if possible.

All the sensitiveness to criticism found in the teaching business is due to the fact that as a profession we have not learned how to receive and give this impersonal, detached criticism of a piece of work. There has been little or no training for it, hence there is almost no

sense or appreciation of it. This plan of re-examination and this labor of reconstruction is original thinking of the highest and most creative type. It is scarcely credible that superintendents and supervisors have overlooked this form of teacher growth. This can be done in any schoolroom, costs no money for tuition and enrollment, is more directly helpful to the school and the teacher than university and post-graduate courses, and can be definitely valued and measured quantitatively from the plan-book in which it is recorded.

A plan-book, recording such growth by service and thru service, for the course of a year or a half-year, might just as well be proof of growth as a certificate from a summer school or from a travel agency, and might as properly be accepted as a claim for higher rating and better pay. Obviously a loose-leaf note book would be a great advantage, since then the new and reconstructed plan will be right next to the original plan. This will be a great advantage to the examiner of the note book, and a greater convenience to the teacher, since there is but one place to enter the subsequent notes and suggestions for improvement.

Without such a system, many good ideas for the improvement of lessons are lost to the best teachers. The preparation of a plan for a lesson in one subject often suggests an addition to a previous lesson plan; right then and there is the time to note the suggestion in its proper place and plan. Most lesson plan books make no adequate provision for such after-thoughts and additions. This is an indication that a stationer has planned our "plan-books," and not a growing teacher. The growing teacher knows that growth is the proof and concomitant of life, therefore her plan-book has made provision for constant growth, constant improvement and addition.

6. Next to the first plan with its notes and additions, the most careful and earnest teacher will now make a new plan incorporating all the improvements, and omitting all the faults of the first plan. Thereafter, trial, criticism, reconstruction, will occur as often as necessary. The growing teacher practically never teaches her lessons just the same way even if she uses the former plan. Ultimately, of course, the growing teacher will find the plan taking a final or complete form as to general scope; details will continue to vary as long as the teacher is growing mentally.

7. The teacher is now ready and is justified in reporting the work to the principal or superintendent for inspection and for criticism. Upon request, she will report or demonstrate it to a group of teachers or to a general teachers' meeting, or will write it up for the educational press.

We have long endured great but unknown losses because teachers who were achieving excellent results have been too shy or too modest, or too fearful of censure for conceitedness, have not felt the professional obligation to share with all teachers their well-earned victories and successes. The success of every good teacher should become the possession of all good teachers, so as to save time and energy in trying things that it has already been proved can or can not be done. What a great conservation movement in education could be furthered by this plan!

8. This spirit of contribution needs cultivation as a professional obligation. It will help powerfully in the formation of a professional

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# Organization of Evening Vocational Classes

Arthur Frank Payne, Head Department of Trade and Industrial Education, University of Minnesota—Minneapolis, Minnesota



The evening vocational school presents to the educational administrator a rare opportunity for "selling" the idea of more education to the citizens of his community. In a large proportion of cities and towns in this country very little has been done in the development of vocational evening schools that really function or meet the needs and demands of the workers.

The majority of school superintendents are overwhelmed with the detail and routine of their daily work. The evening school is simply another added burden. It comes at his busiest time, so the superintendent is not to be greatly blamed if he takes the line of least resistance and least effort, with the result that the usual evening vocational school does not function very effectively and in most cases not at all.

It will probably be conceded without argument that the majority of school superintendents know very little about the particular aims, purposes, methods and organization of vocational education. But, there is a small but growing class of younger superintendents who are beginning to put into practice the idea that education is not entirely for the purpose of "mental discipline" and to "train the mind." They believe that education is a social process and a vital part of our ever changing social order. They believe in teaching people not only subjects, but they feel that the schools must be made to fit the people and not the people to fit the schools; that some justification for their work other than mere tradition must be found and best of all they feel that "education for democracy" implies a more democratic form of education than we have at present.

To these wide-awake superintendents, the vocational evening school presents an opportunity for effective service at which they are increasingly anxious to take advantage. It is for the benefit of these administrators that the analysis of the problems of the evening vocational school is made.

## Types of Vocational Evening Classes.

Vocational evening classes may be classified in several ways, but one of the first things that an administrator wants to know is "what do I have to do to get federal aid for these classes under the Smith-Hughes law?" In answering this question, we shall make our first classification into "Smith-Hughes" vocational classes and "non-Smith-Hughes" vocational classes.

From the standpoint of the administrator and the needs of the community, the non-Smith-Hughes classes are just as important as those that receive aid under the Smith-Hughes law. But it reflects credit upon an administrator and his school system when he can point to certain classes and say that they meet the standards and requirements as set up by the federal board and the state board and receive financial aid from both.

## Requirements for Aid Under the Federal Law.

When attacking the problem of organizing Smith-Hughes vocational evening classes, the administrator should consult Bulletin No. 17, "Organization and Administration of Trade and Industrial Education," and Bulletin No. 18, "Evening Industrial Schools," issued by the

Federal Board for Vocational Education, Washington, D. C.

On page 91 of Bulletin No. 17, the following definition is given: "An evening industrial school or class is one established and maintained under public control for the purpose of giving instruction *supplemental to the day employment* to persons who have entered upon a particular trade or industrial pursuit. Such a class is usually given in the evening, but may be given in the daytime for persons who are employed in the evening, the class at all times being given outside the regular hours of employment." The important part in this quotation is that all instruction in Smith-Hughes vocational evening classes must *supplement the daily employment*. In other words, all students in these particular classes must already be employed at the occupation in which they are receiving further instruction in evening class.

The law further requires that all students in these classes *must be 16 years of age or over*. No maximum age limit is prescribed.

There are other loosely defined requirements such as *adequate plant and equipment* and *adequate salaries* sufficient to attract the best possible teachers. These *teachers must be certificated* by the state board.

## Non-Smith-Hughes Classes.

It is highly desirable from every point of view to have as many vocational evening classes receive the approval and aid available under the federal law. But the benefits of this law are reserved (for very good reasons) to certain types of class work. These are (1) *Trade and Industrial Education* (2) *Vocational Home Making* (3) *Agricultural Education* (4) *Teachers Training Classes*. This restriction places all evening classes in *commercial education* in the non-Smith-Hughes group.

Many very good classes in the first three groups mentioned above find it impossible to meet all the requirements regarding age and daily occupation of students, certification of teachers, etc. For instance, a group of young men clerks in stores might desire to get a start at the machinists' trade or mechanical drafting. This would be a very desirable class under certain circumstances, but it would not be granted aid under the federal law because the instruction would not be "supplementary to their daily employment."

One of the most popular types of vocational evening class instruction is the *commercial classes* such as stenography, typewriting, business, English, business arithmetic, commercial law, etc. These classes are decidedly vocational but are not granted aid under the Smith-Hughes law for the reason that commercial classes were well established, and the prime purpose of the law is to assist in the establishment of industrial classes which have been much neglected.

## Organization of Schools.

By using a third system of grouping we find that evening classes generally fall naturally into three divisions.

(1) *The Academic Classes*. These are classes in the usual academic subjects and may be for purely cultural purposes or for the acquirement

of the minimum essentials such as English, arithmetic, etc., to use as vocational tools.

(2) *Americanization Classes*. This highly desirable type of work must not be confused with the vocational classwork in any manner. Its problems are clean cut, separate and distinct and should be kept so.

(3) *Vocational Classes*. The vocational classes in the average city large enough to need evening classes may be subdivided into (a) commercial classes (b) industrial classes (c) home-making classes.

The three large groups, academic, Americanization and vocational should be organized and administered as separate units; it is fatal to the success of all to mix them together. The aims, purposes, content, methods, type of pupils, are altogether different and cannot be handled successfully as one unit organization except in small towns.

For the vocational classes it is essential to their success that use be made of an *advisory board* made up of leading citizens, both men and women, representing the various groups interested in vocational evening classes. Representatives of manufacturers' organizations, unions, contractors' associations. Settlement workers along with individual workers and employees represent the various trades and occupations.

This advisory board should appoint special sub-committees of experts to suggest and approve courses of study, teachers, methods of advertising, time and place of meeting, organization of special classes, etc. Such an advisory board and special committees, if properly organized and used, may be of the greatest assistance to the person in charge of organizing and vocational evening classes.

A *survey* should always be made to discover the types of classes needed. In making this survey the advisory board would be of great help. A survey is always necessary because the average school administrator is entirely out of touch with the rapid changes now taking place in our industries.

When the topic of vocational evening classes is up for discussion these administrators usually say, "Well, we'll have machine shop, woodwork, mechanical drawing for the men and cooking, sewing and perhaps millinery for the women." And almost always they will ask the regular day school teachers to take charge of the classes, who almost always use the same projects and methods used in the day classes. The administrator organizes the classes by the same methods and under the same restrictions as the academic evening classes. All of which is certain to be fatal to the real success and functioning of these vocational evening classes.

## Funds.

It is always easier to obtain funds for vocational evening classwork than for any other form of education. The Smith-Hughes law states, that, "Two-thirds of the federal allotment to any state may be used for evening vocational classes at the discretion of the state board."



Quite frequently funds to equip or pay part, or all of the salaries of teachers for special classes, may be obtained from local organizations. The local hospitals may be glad to have their beginning nurses take courses in dietetics, invalid cookery, chemistry of goods and to assist financially in buying equipment and supplies and pay salaries. The local Red Cross chapter might be interested in courses of equipment for home nursing, first aid, manufacturers in first aid, safety first, industrial hygiene, blue print reading. The unions will show interest in some special class, such as the "steel square" estimating and figuring costs, strains and stresses, chemistry of materials. Painters' unions will be likely to seek classes in ornament, color harmony, chemistry of paints and paintings.

The possibilities along this line are almost limitless and, aside from any financial aid obtained, make for the finest kind of cooperation which must be received if this type of class is to be successful.

#### Types of Classes and Instruction.

Under the Smith Hughes law all instruction in evening classes is limited to that which "supplements the daily employment of the student." The first question the administrator asks is always, "Well, what courses may I offer under this restriction?" The following list is suggestive but not exhaustive of the wide range of possibilities.

#### Metal Working Courses.

<sup>1</sup>March, 1918, page (—).

##### For Machinists:

Blue print reading.  
Mathematics for machinists.  
Heat treatment of steels.  
Metallurgy.  
Machine design.  
Shop sketching.  
Advanced shop units.

##### Tin Smiths:

Blue print reading.  
Pattern drafting.  
Mathematics for sheet-metal workers.  
Chemistry for sheet metal workers.  
Science of heating and ventilating.  
Architectural forms and details.  
Estimations and costs.  
Advanced shop units.

##### Black Smith:

Blue print reading.  
Elementary metallurgy.  
Heat treatment of irons and steels.  
Advanced shop units.

##### Jeweler:

Jewelry design.  
Engraving.  
Study of precious and semi-precious stones.  
Salesmanship.  
Advanced shop units.

#### Woodworking Courses.

##### Carpenter:

Blue print reading.  
Steel square.  
Roof framing.  
Estimating and costs.  
Architectural forms and details.  
House design.  
Advanced shop units.

##### Cabinet Maker:

Blue print reading.  
Furniture design.  
History of furniture.  
Decoration of woodwork.  
Wood finishing.  
Estimating and costs.  
Advanced shop units.

##### Pattern Maker:

Blue print reading.  
Shop sketching.  
Layarts.  
Advanced shop units.

#### Home Making Courses.

##### Preparation of Foods:

Cooking—plain, desserts, pastry, invalid serving.  
Dietetics.  
Chemistry of foods.  
Meal planning.

##### Sewing:

Plain sewing.  
Garment making.  
Dress making.  
Draping.  
Costume design.  
Machine operations.  
Repairing.  
Millinery.

##### Sanitation:

Cleaning and dyeing fabrics.  
Laundering.  
Household sanitation.

##### Budgets:

Household accounts.  
Analysis of expenditures.  
Savings, investments, insurance.

##### Nursing:

Care of infants.  
First aid.  
Invalid.  
Old age.

#### Organization of Subject Matter.

There is no question but that for vocational evening classes the subject-matter of the courses should be organized on the short, intensive, specific-unit basis. This means instead of offering a long, general, vague course in machine shop, that the work of a machinist should be analyzed, and projects and problems arranged in short specific units such as, (1) bench work fitting and filing (2) drill press (3) shaper (4) planers (5) slotters (6) engine lathe (7) milling machine (8) universal grinder, etc. Each of these units should be made up of a series of operations, processes or projects that assure the complete covering of the field of instruction in that unit.

The following diagram shows in simpler form the idea of the short unit course.

		Course.							
		UNITS							
Projects, Processes or Operations	A								
	B								
	C								
	D								
	E								
	F								

The blank spaces should be filled in with the name of the project, process or operation and these should be known as 1-A, 4-D, 5-F, etc.

A blue-printed diagram might be given to each student and when each step is completed the instructor could mark the grade and other information thus showing the progress of the student.

#### Hours and Evenings.

In organizing vocational evening classes there should be no restrictions as to time of beginning or closing. Classes should be organized any time or place if a large enough group can be gathered together.

Experience shows that two evenings a week is the best arrangement; if it is desired to use the equipment more efficiently it may be advisable to organize the classes in sections in this manner:

Monday	Tuesday	Thursday	Friday
Section A	Section B	Section A	Section B

Wednesday evening is usually a poor night for evening classes.

The best hours are usually from 7:30 to 9:30 with a ten minute recess from 8:25 to 8:35. It is always advisable to devote the entire evening to one class in shop work. This is also true in regard to many of the other classes.

#### Constants and Variables of Evening Class Students.

About the only constant factor in the evening class student body is a more or less well developed desire to learn something that will assist them to promotion. They vary in age, school grade attained, standard of achievement in the fundamental subjects, trade skills, ideals,

objectives and purposes in taking the instruction offered.

In general it will be that the evening vocational class student body is largely made up of people from 18 to 30 years of age. Only rarely will any considerable number be found below or above these ages. These are usually the ambitious people who realize their deficiencies, and desire to better themselves.

There will be found a considerable number of skilled manipulators of tools, materials and processes who desire instruction in academic work *directly related* to their trade.

The second large group will consist of specialized machine operators who desire instruction in operating other more difficult machines. The other large group will consist of those who have no recognized trade, are in "blind-alley jobs" and desire to prepare for entrance to a trade. This group must be segregated from the other groups as under the Smith-Hughes law they cannot be admitted to trade-extension classes.

It is always bad policy to have in the same class young, immature boys and mature men, the skilled and unskilled, beginners and old hands, union men and non-union men. Special classes should be organized for special groups, keeping like groups in the same classes.

#### Getting the Students.

Much depends upon the *printed advertising*. The most effective form is printed announcement of the classes on the pay envelopes of the workers. Permission to do this is usually readily obtained from the manufacturers and business men. Sometimes a small folder slipped into the pay envelope may be used to greater advantage.

Other forms of advertising are window cards with catchily-worded titles, street car advertising. Many street car companies will allow banners to be placed on the car fenders for a few days, free of charge. The newspapers are always willing to "run" short stories or items especially if they are full of human interest and accompanied by good photographs. Personal letters to manufacturers and business men, to unions, contractors, organizations, clubs and associations, of any sort may be utilized. Exhibits of work done are always attractive and it is generally possible to get windows in prominent stores for a few days.

#### Oral Advertising.

In foreign settlements priests, charity workers and settlement workers are a great help. Many priests and pastors will announce the classes at their service. In many places noon meetings held in the factories have produced splendid results. Good, live speakers should address the Rotary and Kiwanis Clubs and the Chamber of Commerce.

#### Registration.

It is usually advisable to have two registration nights. Have the registration take place in some central, easily accessible place, have large banners displayed and well lighted entrances with someone at the door to direct the students. Make it easy for them to find and enter the place.

In the registration hall have large signs for each class displayed with the teachers sitting under them. Let the teachers do the registering for their own classes. Have the teachers consult and advise the students and especially should they establish personal contacts with their students.

Have printed registration cards, with two or more detachable parts. The large card to serve as a permanent record card, the detachable cards to serve as a receipt for the registration fee, class admittance card, used library card, etc.

The Smith-Hughes law states that there shall



be no tuition charged, but it is possible and advisable to charge a registration fee of one or two dollars. This should be returned if the student attends four out of every five class periods. This registration fee will tend to keep out the curious and those who have no serious intentions.

It is advisable to have all registrations tentative for the first two weeks as many students will drop out and want to change their registrations. Make up the definite class lists at the end of this two weeks' period.

#### Holding the Students.

First, remember that day school routine and methods will not work in evening schools. Find out what the students want and then give it to them. Be sure and get good, live teachers who are enthusiastic about the work and the subject. Avoid engaging teachers who are teaching these classes merely for the extra money they get.

Insist that teachers begin the lesson promptly every night. Waiting for laggards simply encourages tardiness which rapidly develops into absence.

Insist that teachers give some definite, concise piece of information to the class every night.

Pay teachers a base rate for each class and a bonus for each student present that night. For example pay a base rate of \$1.50 per evening with a bonus of 20 cents additional for every student present that evening. This makes the teachers' pay dependent upon their holding power.

Have a chart in the main office showing in diagram form exactly how each teacher is holding his class. Any class dropping below eight for two successive nights should be discontinued. This makes the teacher and the students responsible for the continuance of the class.

Have a printed absence mailing card. When a student is absent immediately mail one of

these cards asking him to present the card with an explanation for each absence the next time he comes. It is good psychology to make it easy and profitable to attend, but difficult and uncomfortable to be absent.

Send notices to employers when students complete certain units of instruction. Issue certificates on completion of certain units and diplomas on completion of certain courses.

Give no formal written examination, but check closely on actual work performed and especially on acquired ability to solve practical shop problems.

#### Teachers.

In Smith-Hughes classes all teachers must be approved and certificated by the state department of education. Bulletin No. 18 of the federal board for vocational education has the following to say about teachers of classes in vocational evening schools:

#### Qualification of Teachers.

"Experience in the vocation which is to be taught is an essential qualification for all trade or industrial teachers. Absolute mastery of the part of the trade taught in each of the several units is the prime qualification of the teacher of each unit. A course in telephone repair consisting of several units might conceivably require as many teachers as there were units in the complete course. It is impossible to state the trade experience or qualification in years, since the variation from trade to trade in the length of time it takes to master a trade is so great. It may be said, however, that in general, if three years' experience in the actual work of a trade or industrial pursuit is required as a preliminary qualification, one step will have been taken to exclude inadequately prepared teachers. Ways should be left open, however, to secure persons who have had unusual opportunities for preparation and experience in particular parts of a trade offered as evening school subjects.

"Trade knowledge is not, however, the only

qualification which the evening school teacher should possess. It is the sine qua non to which the other qualifications must be added. To be successful, the evening school teacher must be not only a master of his trade, but also in good standing among his fellow craftsmen. He should be a man of good personality and vigorous health. He should be experienced in handling men and know how to reach them.

#### Selection of Teachers.

"It is evident from the foregoing statements that the matter of selection of the right man to conduct a particular evening school class is of great importance. Unless such a man can be found the class should not be organized."

"Usually evening-school teachers will be selected from the workers in the industry, and from the residents of the community. Except in the rare cases, where the shop teachers or the related subjects teachers from the day school are prepared to give the instruction, the teachers must be a man who is experienced in the work he is to teach and who retains a connection with the trade. The persons responsible for his selection should make a thoro canvass of the community, prepare a list of eligible persons, make an investigation of their records of experience, the esteem in which they are held by their employers and fellow workmen, and have personal interviews."

If at all possible, avoid using the regular day school teachers. The best teachers (provided always that they can teach) are union officials, shop foremen and superintendents, graduate engineers, expert mechanics. In every case get teachers that will command the respect of the students and are closely in touch with local trade practice and know the workers and what they need.

Any school administrator that can organize and carry on an evening vocational school that really functions is a public benefactor and will make a real contribution in the field of educational administration.

## The Organization of Night Schools

Including Reports, Records and Directions for Organization

J. A. Starkweather

The writer's experience in the night schools has convinced him of the need for a set of records and directions for organizing and establishing night school classes. The following plan is the outgrowth of experience in the city of Duluth, Minnesota. This system of records and reports has been tried out and criticized, and has stood the test of several years use in operating a night school which had an enrollment of about two thousand students in a wide range of subjects. These classes were held in schools, shops, factories—wherever the group of students could be collected and a suitable teacher employed. While they are specifically termed night schools, yet not all of the classes were held in the evening, as the classes were held at such hours as to make attendance possible for those who were enrolled.

#### Need for Explicit Directions.

The superintendent of schools, altho directly responsible for night-school classes, cannot, from the nature of his own work and the demands upon his time, give his personal attention to the starting and maintaining of night schools. Since he must delegate the work to others, he should have a definite body of instructions, and definite directions as to practice and methods to be followed in the establishing and maintaining of a night school.

Day-school reports have been so well established that many superintendents have attempt-

ed to use them in making night-school reports, but on account of the difference in the conditions between day and night school, these records, reports, and methods are unsatisfactory. For example—the attendance is not compulsory but is absolutely and completely dependent upon the interest of the learner. The teachers may be people who have worked during the day in the classroom or they may be men from shops and factories. In either case, they do not wish to be overloaded with technicalities in making out a large number of reports. However, as reports are necessary it becomes all the more desirable to have them definite, simple, and explicit.

#### Complete Records Should Be Reduced to the Minimum Number.

On account of the conditions mentioned above, and on account of the fact that night school classes are held until 9:30 or 10 o'clock in the evening, records should be reduced to the minimum number and simplified to the lowest degree. This includes both the reports which the teacher makes out personally and the reports which the principal of each school makes out to the superintendent. However, it should be positively required that the information given, convey to the superintendent two or three very important facts which he can readily see without taking too great a time to examine the reports:

First, what is the total enrollment of all of the night schools combined? Second, what is the average attendance of all of the night schools combined? Third, what is the percentage of attendance of all of the night schools? Fourth and last, but probably most important, what is the average attendance in each class? As a matter of fact, the class should be continued or discontinued on the basis of whether or not the attendance is holding up to a normal percentage of the enrolled number.

In the opinion of the writer, classes should not be started for less than ten and should be discontinued if the average monthly attendance falls below eight. In most classes of night school students, experience has shown that the enrollment should not be larger than twenty-five and probably twenty is a better number, while if it falls below eight, evidence is strong that interest is lagging and the class is not profitable.

#### The Difficulties of Keeping Attendance.

One of the most difficult problems in the matter of records for a night school is keeping an attendance record which will quickly reveal the essential facts to the superintendent. Night school students, as a rule, come at irregular times. They are not all due at the same hour in the evening nor are they dismissed at the same hour. A student may come for one class or he may come for two classes in an evening.



Form 95 N

**PUBLIC NIGHT SCHOOLS**  
DULUTH, MINN.

**Absence from Class**

School \_\_\_\_\_ 1918

M \_\_\_\_\_

You have been absent from the class in \_\_\_\_\_ since \_\_\_\_\_ I hope it is not permanent. If you need special help, or if you would like to take up another course, please return as soon as possible and make your wants known.

Upon the completion of all courses we will issue a certificate showing that the course has been completed, and a report showing that you are attending the Night School is sent to your employer several times during the year.

Yours Sincerely,

\_\_\_\_\_  
Instructor.

FIG. 1. NOTICE OF ABSENCE. ORIGINAL IS POST-CARD SIZE.

His attendance may be kept by one teacher or by three teachers. For example—he might attend an English and an arithmetic class on Monday and a bookkeeping class on Tuesday. Or, he may take several other combinations of subjects which will make it possible for him to have even a larger number of teachers, each one keeping a record of his attendance.

It is evident in the case of a student reported by three teachers that unless some provision is made for counting him only once in the total enrollment of the school, he may be counted three times and therefore give a false total enrollment altho the record of his attendance is perfectly accurate. Several methods of avoiding this difficulty have been tried, and the following one has been found to be the most satisfactory.

#### Keeping Records and Making Reports.

Each teacher, at the beginning of night school, makes out a card "evening students' record," form 101 N. S., for each student and keeps the record of attendance on one side of the card and the record of credits and work done on the other side of the card. Each pupil is then assigned to some one teacher in whose class he appears for his session room record. The card (form 101 N. S.) for this pupil is marked in red ink "session room". Each teacher who has this pupil keeps the record of his attendance in his own class, but only one teacher keeps a session-room card for that particular pupil.

At the end of the month, each teacher hands in a report of class attendance, and those teachers who have session room cards hand in an additional report marked "session-room report." From the teachers' reports marked "session-room report" the principal makes out the total enrollment and percentage of attendance for the building. From the cards, "classroom report"

he copies on form 107 N. S. each teacher's class report after it has been properly checked.

While there are some objections to this method of making a principal's building report, due to the fact that occasionally a night-school student may be present in some class but may not report at his session-room class, the attendance is as nearly accurate as it is possible to secure in a night school. The account is probably balanced by the fact that the student may be present in his session-room class and fail to appear in some other class. As far as the building record is concerned, however, a student is present or absent if he is present or absent from his session-room class.

A student who has been absent three or more consecutive times, including the last meeting of the month, is marked "left" at the end of the month and his attendance card is turned in to the principal's office and kept on file for use in case he returns again. If he returns, his attendance card may be secured from the principal and an attendance record started for him again.

#### Teachers of Night School Classes.

As has already been said, the students who attend night school are a very different group of people from those who attend day school. They have a very definite purpose in mind in attending night school, and unless the night school meets their needs they are not bound to attend.

As many of these night school people are employed in certain industries, they wish to master very definite subject matter. This must be taught by someone who is actually familiar with the practical side of the job. Night school students are very critical of theory unless they can see the immediate application of the theory to the work which they are doing. They are impatient for results and are inclined to feel that the results should be immediate and not in the distant future.

Form No. 96 N. S.

**PUBLIC NIGHT SCHOOLS, Duluth, Minn.**

M \_\_\_\_\_ EMPLOYEE

Employed at the \_\_\_\_\_ EMPLOYER

In the \_\_\_\_\_ DEPARTMENT OR MILL

As a \_\_\_\_\_ KIND OF WORK

Under the Supervision of M \_\_\_\_\_ Check number \_\_\_\_\_

Enrolled in the \_\_\_\_\_ Course at \_\_\_\_\_

the \_\_\_\_\_ Night School on \_\_\_\_\_ 191 \_\_\_\_\_

The above named employer is hereby informed that the above named employee **CONTINUES TO ATTEND,** and the undersigned hopes that some cognizance will be taken thereof and thereby encourage the student to complete the course.

\_\_\_\_\_  
Principal

FIG. 2. NOTICE TO EMPLOYER. ORIGINAL IS GREEN CARD, 3" by 5" IN SIZE.

This condition makes it necessary for the night school director to secure teachers who are thoroly familiar with the practical side of the work and who have sufficient general information and breadth of experience to enable them to bring something new to the men whom they teach. Our experience has shown that we get the best results by choosing men who are employed in the trade and giving them instruction in the methods of teaching.

Instruction in the methods of teaching is exceedingly important since a man may be thoroly familiar with the practical side but may not be able to tell others. In other words, he must be able to analyze the methods which make his work successful so that he can bring before the men, in very simple form, and in a progressive series of steps, the facts which they ought to know in order to reach the highest point of efficiency.

#### Making Past Experience Available for Present Situation.

One thing which can be criticized in most of the night schools of the country, is that the experience of preceding years has been stored up in the minds of those who had the experience but very little of it has been made available for those who are new to the work.

Therefore, whatever system of records and reports of night schools is established, one requirement should be that criticisms and records of successes should be written and placed on record with the superintendent and made available for beginners in the years that follow.

#### The Desirability of a Night School Director.

In cities of considerable size, the night school work, including an Americanization program, has expanded to such a degree that it is very desirable to have someone devote his entire time to the organization of classes and supervision of the work which is being done.

Form No. 97 N. S.

**PUBLIC NIGHT SCHOOLS, Duluth, Minn.**

M \_\_\_\_\_ EMPLOYEE

Employed at the \_\_\_\_\_ EMPLOYER

In the \_\_\_\_\_ DEPARTMENT OR MILL

As a \_\_\_\_\_ KIND OF WORK

Under the Supervision of M \_\_\_\_\_ Check number \_\_\_\_\_

Enrolled in the \_\_\_\_\_ Course at \_\_\_\_\_

the \_\_\_\_\_ Night School on \_\_\_\_\_ 191 \_\_\_\_\_

The above named employer is hereby informed that the above named employee **DISCONTINUED ATTENDANCE.**

\_\_\_\_\_  
Principal

FIG. 3. NOTICE TO EMPLOYER. ORIGINAL CARD IS BRIGHT YELLOW STOCK.

Form No. 98 N. S.

**PUBLIC NIGHT SCHOOLS, Duluth, Minn.**

**PUPIL'S CLASS ENROLLMENT CARD**

Name \_\_\_\_\_

\_\_\_\_\_  
First name and middle name

\_\_\_\_\_  
Last name

\_\_\_\_\_  
Address

\_\_\_\_\_  
City

\_\_\_\_\_  
State

\_\_\_\_\_  
Zip

\_\_\_\_\_  
Date

\_\_\_\_\_  
Has enrolled to enter the class in \_\_\_\_\_

\_\_\_\_\_  
Class

\_\_\_\_\_  
Section

\_\_\_\_\_  
Teacher

\_\_\_\_\_  
Instructor

\_\_\_\_\_  
Principal

\_\_\_\_\_  
Students should fill out this card and give it to the teacher for admission into the class.

FIG. 4. ENROLLMENT CARD. THE ORIGINAL IS STRONG RED COLOR.



Form 101 N.S.

## PUBLIC NIGHT SCHOOLS, DULUTH, MINN.

### CERTIFICATE

This is to Certify that \_\_\_\_\_  
has been a Student in the \_\_\_\_\_ Course of  
\_\_\_\_\_ NIGHT SCHOOL, during the months of \_\_\_\_\_  
attending \_\_\_\_\_ nights

This course included: \_\_\_\_\_

Teacher.  
Principal.

192

FIG. 5. REDUCED COPY OF CERTIFICATE AWARDED FOR SUCCESSFUL WORK.

**DULUTH PUBLIC NIGHT SCHOOLS, Duluth, Minn.**  
EVENING ATTENDANCE RECORD, 1918-1919

Name \_\_\_\_\_ Address \_\_\_\_\_

Session Room \_\_\_\_\_ Course \_\_\_\_\_ Room \_\_\_\_\_ Receipt No. \_\_\_\_\_

	M	T	W	Th	F	S	M	T	W	Th	F	S	M	T	W	Th	F	S	M	T	W	Th	F	S	Evenings Present	Evenings Absent	Standing
DATE																											
SEPT																											
DATE	29	30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
OCT																											
DATE	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
NOV																											
DATE	24	25	26	27	28	29	30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
DEC																											
DATE																											
JAN																											
DATE	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
FEB																											
DATE	23	24	25	26	27	28	29	30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
MARCH																											
DATE	22	23	24	25	26	27	28	29	30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
APRIL																											
DATE	26	27	28	29	30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
MAY																											
DATE																											

H-Holidays  
E-Enter A-Absent L-Left I-Present R-Readmitted T-Tardy Ex-Excused C-Completed Course

Instructor \_\_\_\_\_ Instructor \_\_\_\_\_

FIG. 8 (OBVERSE OF FIG. 7). SCHOLARSHIP RECORD.

Form 101 N.S.

## DULUTH PUBLIC NIGHT SCHOOLS, DULUTH, MINN.

### EVENING STUDENT'S RECORD, SEASON 1918, 1919

Name \_\_\_\_\_ Address \_\_\_\_\_

General Course \_\_\_\_\_ Room \_\_\_\_\_

Name of Course	Began	Ended	Lessons Offered	Lessons Attended	Credit	Brief statement of Instructor's opinion of student.	
						With Distinction	"Attitude" "Gen. Ability"
					Yes No		
					Yes No		
					Yes No		
					Yes No		
					Yes No		
					Yes No		
					Yes No		

Left School: \_\_\_\_\_ Reason: \_\_\_\_\_

Remarks: \_\_\_\_\_

"Mark—Excellent, Good, Fair, Poor.  
Has student previously been enrolled in other courses during 1918-19? \_\_\_\_\_  
Is student enrolled at present time in another course? \_\_\_\_\_

Instructor \_\_\_\_\_ Instructor \_\_\_\_\_

FIG. 7. STUDENT'S ATTENDANCE RECORD (REVERSE OF FIG. 8).

Form 107 N.S.

## DULUTH PUBLIC SCHOOLS, DULUTH, MINN.

### TEACHERS MONTHLY REPORT---NIGHT SCHOOLS

School \_\_\_\_\_ Subject \_\_\_\_\_

For month ending \_\_\_\_\_ 19\_\_

	Men	Women	Total
1. Nights taught.....			
2. Total nights present (Form 101 N.S.).....			
3. Average nightly attendance (2÷1).....			
4. Number belonging last report.....			
5. New students enrolled during month.....			
6. Students left during month.....			
7. Students readmitted during month.....			
8. Students left by transfer during month (Ltr).....			
9. Number belonging at end of month (4+5+7)-(6+8).....			
10. Total number enrolled last month.....			
11. Total number enrolled to date (10+5).....			
12. Percent of attendance (3÷9).....			
13. Visits.....			

FIG. 6. TEACHERS' REPORT FORM.

Form 104 N.S.

## MEMBERSHIP CARD

NO. **576**

Night School

This Certifies that M \_\_\_\_\_

Address \_\_\_\_\_

has paid the Enrollment of One Dollar and is entitled to take any subject of Study during school year.

191 \_\_\_\_\_ Principal.

FIG. 9. RECEIPT FORM.

It is a difficult thing to reach those who are most in need of night schools thru newspaper or general advertising, and it is frequently difficult to reach them thru their employers because there is often the tendency to suspect the motives of an employer who strongly urges his employees to attend night school.

The method which is certain of meeting both the approval of employers and employees is making a personal canvass of the men themselves thru a disinterested party. A night school director can do this at a time when the men are free to listen. As soon as the director has made an explanation of his night school program, he should talk personally with several men; find out which ones are most interested and appoint a committee of interested men to talk to the other men in the shop or factory.

These men will later present a list of the students who have agreed to attend to the director. This plan is much more popular with

the men than any other method and more certain to secure a class which can be continued with credit to the school and profit to the learners. It is evident, however, that such a plan cannot be carried out by a man who is teaching all day long. It must be done by someone who is free to come and go at any hour of the day when workingmen can be reached. Such a plan presupposes a night school director.

The following is an exhibit of report blanks and record cards now in use in Duluth:

#### Duluth Public Schools.

Form 93 N.S.

Night Schools.

#### DIRECTIONS FOR ENROLLMENTS, RECORDS, AND REPORTS.

Following is a list of the blanks to be used in night schools:

Form No.	Color	Size
93 N.S.	White	8½x11

94 N.S.	Directions for organization.	white	8½x11
95 N.S.	Absent from class card.	manilla	4x 6
96 N.S.	Notice to employers "continues."	green	3x 5
97 N.S.	Notice to employers "discontinues."	yellow	3x 5
98 N.S.	Night school certificate.	white	5x 8
99 N.S.			
100 N.S.			
101 N.S.	Students' record card.	white	4x 6
102 N.S.	Registration card.	white	4x 6
103 N.S.	Enrollment card.	red	3x 5
104 N.S.	Membership card (N.S. receipt).	white	3x 5
105 N.S.	Principal's monthly report.	white	large sheet
106 N.S.			
107 N.S.	Teachers' monthly report.	white	5½x 8

1. The first two sessions of night school should be devoted to the enrollment of students. All the teachers of the night school should be









# A Standardized Budget

Arthur B. Moehlman, Director of Statistics and Reference,  
Board of Education, Detroit, Mich.

Detroit has long felt that standardized budget procedure was essential to a complete reorganization of its financial system. The first step in this direction was the introduction several years ago of a cost accounting system. The operation of this made necessary a reorganization of statistical records upon a uniform basis. The comparative unit selected was the student hour, a chronological sixty-minute instruction hour. The necessity of securing a cost report upon a subject basis developed a complicated problem. It was difficult to compare the elementary subjects with those of the intermediate and high schools. A reclassification of the entire course of study was decided upon, partly to meet this problem and partly to fit into the new organization plan. As a result Detroit has developed six departments of instruction that cover the entire course of study from kindergarten thru the college units. These comprise (1) Fine Arts, (2) Health Education, (3) Languages, (4) Science and Mathematics, (5) Social Sciences, and (6) Vocational Education. This necessitates only six uniform splits to determine subject costs. This classification in its details may be of interest to other cities and is therefore given below.

## CLASSIFICATION OF SUBJECTS ACCORDING TO THE ORGANIZATION OF THE DEPARTMENTS OF INSTRUCTION IN DETROIT, MICHIGAN.

### 1. Fine Arts:

- A. Art.
- B. Design.
- C. Music.

### 2. Health Education:

- A. Athletics.
- B. Individual work.
- C. Health subjects.
- D. Military training.
- E. Physical training.
- F. Swimming.

### 3. Languages:

- A. English.
- B. Literature.
- C. Penmanship.
- D. Reading.
- E. Rhetoric.
- F. Spelling.
- G. Ancient languages.
  1. Greek.
  2. Latin.
- H. Modern languages.
  1. French.
  2. German.
  3. Spanish.

### 4. Science and Mathematics:

- A. Mathematics.
  1. Algebra.
  2. Arithmetic.
  3. Geometry.
  4. Reviews.
  5. Shop mathematics.
  6. Trigonometry.
- B. Sciences.
  1. Agriculture.
  2. Biology.
  3. Bacteriology.
  4. Botany.
  5. Inorganic chemistry.
  6. Qualitative analysis.
  7. Quantitative analysis.
  8. Organic chemistry.

9. Physical chemistry.
10. General science.
11. Gardening.
12. Nature study.
13. Physiology.
14. Physics.
15. Zoology.

### 5. Social Sciences:

- A. Civics.
- B. Economics.
- C. History.
  1. Art.
  2. Educational.
  3. Industrial.
  4. Political.
- D. Geography.
  1. Physical.
  2. Commercial.
- E. Philosophy.
- F. Psychology.
- G. Thrift.
- H. Safe living.
- I. Sociology.
- J. Visual education.

### 6. Vocational Education:

- A. Commercial.
  1. Bookkeeping.
  2. Calculating machine.
  3. Commercial law.
  4. Cost accounting.
  5. Office practice.
  6. Salesmanship.
  7. Secretarial work.
  8. Shorthand.
  9. Typewriting.
- B. Continuation and part-time.
  1. General (junior) continuation for boys.
  2. General (junior) continuation for girls.
  3. Part-time (senior) continuation for men.
  4. Part-time (senior) continuation for women.
- C. Home economics.
  1. Cookery.
  2. Sewing.
  3. Millinery.
  4. Preparatory nursing.
  5. Trade dressmaking.
  6. Trade millinery.
  7. Hotel occupations.
- D. Drawing.
  1. Architectural drawing.
  2. Constructive design.
  3. Mechanical drawing.
- E. Mechanic arts.
  1. Manual training courses.
  2. Technical training courses.
  3. Industrial try-out courses.
  4. Elementary industrial trade courses.
- F. Teacher training.
- G. Medical training.

When this had been accomplished it was possible to complete the work of standardization by adopting a definite and uniform budget.

The factors considered in the adoption of this plan were (1) to make the budget conform to the accounting system, (2) to follow the general divisions recommended by the United States Bureau of Education and the National Association of School Accounting Officers, and (3) to build around these principles a procedure that might fit conditions in almost any community.

In general the main divisions as outlined by the National Association of School Accounting Officers have been used. Certain divergence was made necessary by peculiar local conditions. In the discussion of the Detroit plan such dif-

ferences will be commented upon thruout this article.

The Detroit budget has been divided into the following groups:

### A. Administrative (General Control):

1. Educational.
  - Personal service.
    - a—Executive.
    - b—Supervisors.
    - c—Attendance.
    - d—Clerical.
  - Service other than personal.
    - e—Stationery, postage and supplies.
    - f—Transportation.
      1. Automobile.
      2. Street car.
    - g—Publications.
    - h—Travelling expenses.
2. Business.
  - a—Executive.
    - a. Personal service.
    - b. Supplies.
  - b—Records, accounts and payrolls.
    - a. Personal service.
    - b. Supplies.
  - c—Purchase, storage and distribution of supplies.
    - a. Personal service.
    - b. Supplies.
  - d—Census.
  - e—Printing proceedings, annual report, manual and directory.
  - f—Transportation.
    1. Automobile.
    2. Street car.
  - g—Travelling expenses.

The Detroit board of education believes that the primary purpose of the organization is to furnish instruction and that all business activities necessary to make the schools function physically are distinctly subordinate to the educational activities. The order of considering administrative requests has been reversed and prominence given to the educational factors. Three years ago this policy was established by the newly elected board of seven members when the superintendent was made the chief executive officer of the schools with the business manager as a subordinate instead of a coordinate official.

Another distinct point of departure from general procedure is charging supervisors against administration or general control rather than considering this an instruction cost. The reasons are obvious. In perfecting the organization of the schools the supervisor has been given his proper place in accordance with work actually performed. The supervisor's time in Detroit is devoted to administrative detail as well as to actual supervision and inspection of instruction. Members of this staff do not teach and they are not attached to one school or a division of schools such as elementary, intermediate, etc. The Detroit supervisor functions for the entire system, controlling instruction in grades one thru twelve. Under the circumstances it is not good accounting to charge these as a part of the direct teaching cost any more than it would be proper to do so in the case of the superintendent and his assistants.

While the actual functioning of the attendance department in enforcing compulsory ed-



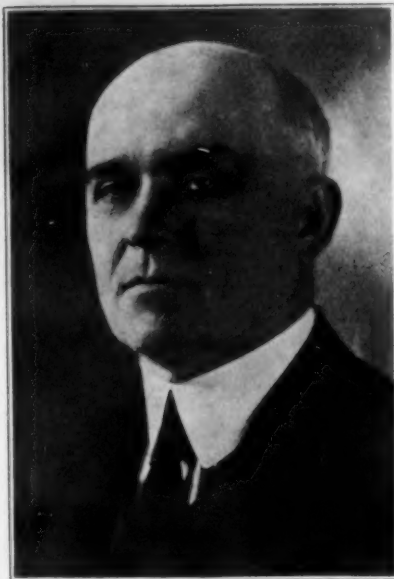
education laws is an educational charge, the direct cost of compiling the census, an act to secure revenue, is distinctly a cost of business administration.

Apart from these noted changes this division includes all regulative and executive service. Under educational administration are included all salaries and supplies of administrative and supervisory officers, clerical hire, supplies, transportation, publications and travelling expenses.

Under business administration are three divisions: (a) Executive, including salaries and office supplies of the business manager, the assistant secretary, the supervisory engineer, the supervisor of properties and their staffs; (b) Records, accounts and payrolls, includes all items under these activities; (c) Purchase, storage and distribution of supplies carries with it the proper charges against these activities. The remaining items in this division are the cost of taking the census, the printing of the reports of the board of education, transportation, and travelling expenses of officials to conventions or upon trips of inspection.

#### B. Instruction:

1. Kindergarten instruction.
  - a. Personal service.
  - b. Educational supplies.
  - c. Free text and library books.
2. Elementary instruction.
  - I. Day school.
    - a. Personal service.
    - b. Educational supplies.
    - c. Manual training supplies.
    - d. Physical education supplies.
    - e. Free text and library books.
    - f. Repairing and rebinding books.
  - II. Summer school.
    - a. Personal service.
    - b. Educational supplies.
  - III. Evening school.
    - a. Personal service.
    - b. Educational supplies.
    - c. Free text and library books.
3. Special instruction.
  - a. Instruction of the blind.
    - I. Elementary.
      - a. Personal service.
      - b. Educational supplies.
    - II. Intermediate.
      - a. Personal service.
      - b. Educational supplies.
    - III. High.
      - a. Personal service.
      - b. Educational supplies.
  - b. Instruction of the deaf.
    - I. Elementary.
      - a. Personal service.
      - b. Educational supplies.
    - II. Intermediate.
      - a. Personal service.
      - b. Educational supplies.
    - III. High.
      - a. Personal service.
      - b. Educational supplies.
  - c. Instruction for correction of defective speech.
    - a. Personal service.
    - b. Educational supplies.
  - d. Instruction of the anemic.
    - I. Elementary.
      - a. Personal service.
      - b. Educational supplies.
    - II. Intermediate.
      - a. Personal service.
      - b. Educational supplies.
    - III. High.
      - a. Personal service.
      - b. Educational supplies.
  - e. Instruction of the crippled.
    - I. Elementary.
      - a. Personal service.
      - b. Educational supplies.
    - II. Intermediate.
      - a. Personal service.
      - b. Educational supplies.
    - III. High.
      - a. Personal service.
      - b. Educational supplies.
  - f. Instruction of defective children (special classes Type A—6 to 13½ years).
    - a. Personal service.
    - b. Educational supplies.
  - g. Instruction of defective children (special classes Type B).
    - a. Personal service.
    - b. Educational supplies.



DR. J. G. COLLICOTT,  
Superintendent of Schools-Elect,  
Columbus, O.

- h. Instruction of incorrigible children.
  - I. Elementary.
    - a. Personal service.
    - b. Educational supplies.
  - II. Intermediate.
    - a. Personal service.
    - b. Educational supplies.
  - III. High.
    - a. Personal service.
    - b. Educational supplies.
4. Intermediate instruction.
  - I. Day school.
    - a. Personal service.
    - b. Educational supplies.
    - c. Manual training supplies.
    - d. Physical education supplies.
    - e. Free text and library books.
  - II. Summer school.
    - a. Personal service.
    - b. Educational supplies.
  - III. Evening school.
    - a. Personal service.
    - b. Educational supplies.
    - c. Free text and library books.
5. High school instruction.
  - I. Day school.
    - a. Personal service.
    - b. Educational supplies.
    - c. Manual training supplies.
    - d. Physical education supplies.
    - e. Text and library books.
  - II. Summer school.
    - a. Personal service.
    - b. Educational supplies.
  - III. Evening school.
    - a. Personal service.
    - b. Educational supplies.
    - c. Free text and library books.
6. Technical instruction.
  - I. Day school.
    - a. Personal service.
    - b. Educational supplies.
    - c. Technical supplies.
    - d. Library books.
  - II. Summer school.
    - a. Personal service.
    - b. Educational supplies.
    - c. Technical supplies.
  - III. Evening school.
    - a. Personal service.
    - b. Educational supplies.
    - c. Technical supplies.
    - d. Free text and library books.
7. Continuation instruction.
  - a. Personal service.
  - b. Educational supplies.
  - c. Manual training supplies.
8. Normal instruction.
  - I. Day school.
    - a. Personal service.
    - b. Educational supplies.
    - c. Library books.
  - II. Summer school.
    - a. Personal service.
    - b. Educational supplies.
  - III. Evening school.
    - a. Personal service.
    - b. Educational supplies.
9. Collegiate instruction.
  - a. Detroit Junior College.

- I. Day school.
  - a. Personal service.
  - b. Educational supplies.
  - c. Library books.
- II. Summer school.
  - a. Personal service.
  - b. Educational supplies.
- III. Evening school.
  - a. Personal service.
  - b. Educational supplies.
- b. Detroit College of Medicine and Surgery.
  - a. Personal service.
  - b. Educational supplies.
  - c. Library books.

General supervision has been excluded from the instruction division and within this large unit the arrangement of items differs greatly from the procedure in some cities. The primary split within this division is by instructional groups in accordance with Detroit policy:

1. Kindergarten.
2. Elementary (grades 1 to 6).
3. Special.
4. Intermediate (grades 7 to 9).
5. High (grades 10 to 12).
6. Technical (9 to 12).
7. Continuation.
8. Normal school (teacher training).
9. Collegiate.

Under each of these activities is a secondary split bringing the requests for (a) days, (b) summer, and (c) evening instruction into one group. Personal service in each group is subdivided in detail into principals' and teachers' salaries, giving each individual's salary.

This shows at a glance how much is being requested for each division and permits the development of arguments, upon a cost basis, for the budget, as will be seen in the latter part of this discussion.

#### C. Auxiliary Agencies and Sundry Activities:

1. Playgrounds.
  - a. Personal service.
  - b. Supplies.
2. Social centers.
  - a. Personal service.
  - b. Supplies.
3. Parental school.
  - a. Personal service.
  - b. Supplies.
4. Baths.
  - I. Elementary.
    - a. Personal service.
    - b. Supplies.
    - c. Fuel.
  - II. Intermediate.
    - a. Personal service.
    - b. Supplies.
    - c. Fuel.
  - III. High.
    - a. Personal service.
    - b. Supplies.
    - c. Fuel.
5. Lunches.
  - a. Anemic children.
  - b. Crippled children.
  - c. Defective children.
  - d. Parental school.
6. Transportation of indigent and crippled children (by activity).

This includes special activities not classified as instruction. The items that would naturally fall under this heading would be the operation of:

1. Playgrounds.
2. Social centers.
3. Parental school.
4. Baths.
5. Lunches.
6. Transportation of indigent pupils.
7. Books and supplies for indigent pupils.

The children at the parental school receive their instruction in regular schools. They are given board and lodging at the home.

The chief difference from occasional practice in this division is the absence of the school library as a charge. Detroit considers the school library as a direct instruction charge and is building its new curriculum in all divisions with a sense of the importance of this activity.

Health service is absent because this function is performed by the board of health and is charged directly to that department.



**D. Expenses of Fixed Charges:**

1. Rent.
2. Insurance on materials and stores, automobile, and liability.
3. Personal injury claims.
  - a. First aid.
  - b. Employers' liability.
4. Contingencies.

**E. Payment of Loans (Debt Service):**

1. Redemption of short time loans.
2. Interest on short time loans.

This classification follows general practice: The Detroit school district is dependent financially upon the common council, the legislative body of the city of Detroit, for appropriations, bonds and their redemption are not carried as a charge against the school district but against the city. The only items falling under this classification are short time loans that the board of education is authorized to incur. The headings were therefore changed to conform with the local situation and called "payment of loans."

**F. Operation of School Plant:**

1. Personal service (janitors and engineers).
  - a. Day schools.
  - b. Evening schools.
  - c. Extra rooms.
  - d. Crossing men.
  - e. New buildings.
2. Personal service (matrons and domestics).
  - a. Elementary schools.
  - b. Special rooms.
  - c. Intermediate schools.
  - d. High schools.
3. Supplies.
4. Gas and electricity.
5. Fuel.
6. Telephone service.

This division follows general procedure and includes all charges against operation of buildings and grounds or, collectively, the school plant. The items are divided into personal service, supplies, fuel, lighting, and telephone service. The salaries of the supervising engineer and his staff are administrative charges and are treated as such in division A-2.

**G. Maintenance of School Plant:**

1. Upkeep of grounds (repairs).
  - a. Labor cost.
  - b. Materials.
2. Repair of buildings.
  - a. Labor cost.
  - b. Materials.
3. Replacement of educational furniture.
4. Replacement of other equipment.

This division follows general practice and includes all direct charges to the maintenance of the school plant.

**H. Capital Outlay:**

1. Purchase of land (items arranged alphabetically).
2. Improvements to sites for athletic purposes (items arranged alphabetically).
3. New buildings (items arranged alphabetically).
  - a. Buildings.
  - b. Architectural and engineering fees or costs.
  - c. Landscaping.
  - d. Playgrounds.
4. Alterations to buildings (not repairs) items arranged alphabetically).
5. Equipment and furniture for new buildings (items arranged alphabetically).
6. Equipment and furniture for old buildings (items arranged alphabetically).

Capital outlay has been definitely defined and the differences that appear in the above are in the arrangement of the sub-activities to meet local conditions.

**I. Credits:**

- a. From the federal government.
- b. From the state.
- c. From other sources.

The board of education receives moneys from certain sources which it applies to its budget as a credit. After the amounts requested have been allowed by the appropriating body these credits are deducted from the maintenance fund and the net result is the amount to be raised by taxation.

**Method of Presentation.**

In the second part of this discussion will be

considered the method of making up and presenting this budget.

On or about September 1 of each year the various departments begin compiling their departmental estimates. These are sent to the director of the budget about the middle of October. These requests are then analyzed in conference with departmental heads, suggestions made, and certain changes made. The requests are then compiled in temporary form and placed before the superintendent and his assistants for their consideration. This consideration covers several weeks. The estimates are taken up by departments.

The result of these conferences is then placed into the form to be later discussed and presented by the superintendent to the survey committee of the board of education not later than the second week in December. Upon analysis and revision by this committee the budget is presented to the board of education for approval on or before the first day of January.

2. A statement of activities contemplated under the proposed budget, with arguments therefore.

This is followed by a detailed analysis of each activity carried in the budget. If elementary instruction (B-2) (day schools) is to be analyzed then the comparison is made of the sub-activities under a, b, c, d, e, and f. These are analyzed and compared with like sub-activities for the current year and are preceded by a narrative that includes the number of pupils served, the character of the service, and the cost. The current and the proposed costs are compared and argument given for the increase.

The detailed personal service report of this activity may be found on this page.

The detailed supply service report of this activity may be found on this page.

These sub-activities are further analyzed in personal service and supply divisions. In the personal service division the schedule of that particular activity is first given and then the

**GENERAL STATEMENT.**

Divisions	Allowed 1920-21	Per Cent of the Total Maintenance Fund	Asked 1921-22	Per Cent of the Total Maintenance Fund	Inc.	Per Cent Inc.
A. Administration .....	.....	.....	.....	.....	.....	.....
B. Instruction .....	.....	.....	.....	.....	.....	.....
C. Auxiliary Agencies and Sundry Activities .....	.....	.....	.....	.....	.....	.....
D. Fixed Charges .....	.....	.....	.....	.....	.....	.....
E. Payment of Loan .....	.....	.....	.....	.....	.....	.....
F. Operation of School Plant .....	.....	.....	.....	.....	.....	.....
G. Maintenance of School Plant .....	.....	.....	.....	.....	.....	.....
Total Maintenance Fund..	.....	100 %	.....	100 %	.....	.....
H. Capital Outlay .....	.....	.....	.....	.....	.....	.....
Grand Total .....	.....	.....	.....	.....	.....	.....
I. Credits .....	.....	.....	.....	.....	.....	.....

After approval it is sent to the city controller on or before January 17 to be incorporated as a part of the other city budget requests.

The actual form in which the budget is prepared for consideration may be discussed in detail. In considering the proposed expenditures the board of education first desires a general comparison between the proposed and the preceding budgets. It also desires to know immediately whether the requested appropriations make a well balanced budget. This is given in the general statement.

number of positions at each salary are itemized.

**Detailed Analysis of Personal Service by Activities.****B. Division.****2. Activity.**

(Schedule of each activity) personal service detailed.

The supply requests are then analyzed in detail in accordance with the following table.

**Detailed Analysis of Supplies by Activities.****A. Division.****1. Activity.**

Analysis of Supply Requests.

**GENERAL ANALYSIS BY ACTIVITY.****A. Division.****1. Activity.**

Narrative of the specific activity including:

1. Number of pupils to be served.
2. Approximate cost of such service.

3. Number of pupils being served during current year.

4. Approximate cost of such service.

5. Argument to justify increase.

Items	Amount Asked 1920-21	Amount Allowed 1920-21	Estimated Expendi- tures 1920-21	Amount Asked 1921-22	Increase Over Amount Allowed	Increase Over Estimated Expendi- tures	Per Cent Inc. Over Amount Allowed	Per Cent Inc. Over Estimated Expendi- tures
A .....	.....	.....	.....	.....	.....	.....	.....	.....
B .....	.....	.....	.....	.....	.....	.....	.....	.....
C .....	.....	.....	.....	.....	.....	.....	.....	.....
D .....	.....	.....	.....	.....	.....	.....	.....	.....
E .....	.....	.....	.....	.....	.....	.....	.....	.....
F .....	.....	.....	.....	.....	.....	.....	.....	.....
G .....	.....	.....	.....	.....	.....	.....	.....	.....
H .....	.....	.....	.....	.....	.....	.....	.....	.....
I .....	.....	.....	.....	.....	.....	.....	.....	.....
Totals .....	.....	.....	.....	.....	.....	.....	.....	.....

After a preliminary survey of these comparative tables, the general argument follows. This is a comprehensive statement of activities undertaken in the present budget and a statement of activities contemplated under the proposed budget. This argument may cover half a dozen pages but deals only in the terms of the general divisions as outlined above.

**General Argument.**

1. A statement of activities under the present budget.

**Capital Outlay.**

Capital outlay will be presented first under the six divisions considered earlier in the discussion of the budget divisions. The detailed analysis of these, together with arguments therefore will be carried in a manner similar to that pursued in the consideration of the maintenance fund.

**Budget Aims Achieved.**

The question naturally arises how this man-

(Concluded on Page 95)



## Some Fallacies of Mechanical Ventilation

Jacques W. Redway, F. R. G. S., Meteorological Laboratory, Mount Vernon, N. Y.

One cannot easily find a reason or a defense for keeping the temperature of a schoolroom at 86 degrees day after day. But this was exactly what had occurred—a matter due partly to official red tape, but chiefly to inexcusable ignorance. In reply to the protest of a parent whose child had suffered from the condition noted, the parent was informed that opening the windows of a room disturbed the ventilation of the whole building. It was also pointed out that a regulation of the school board forbade the opening of windows during the sessions of the school. The parent in turn pointed to another regulation of the school board requiring the opening of the windows at recess.

In this, as in other buildings of the system the registration of the temperature was required, but an inspection of the reports of temperature conditions, if one was made, did not seem to impress any official of the system with the fact that a temperature varying between 80 and 90 degrees in a living room where forty pupils were congregated was a matter worthy of consideration, especially as the temperature out of doors was below the freezing point. The case in question may have been an exaggerated instance of official stupidity, but it is not an uncommon one. Moreover, the notion that opening the windows of any room in a school building checks the circulation of the air in the other rooms is as firmly ingrained as the doctrine of infant damnation. In any case the same ultimate is achieved. The infant gets it.

### Effect of Opening Windows.

The mechanical ventilation in school buildings most commonly employed is one or another of the variations of the "plenum" system. The air is forced thru ducts by a blower into the various classrooms of the building. In some cases escape ducts are a part of the system; in others the excess of air escapes thru the crevices of doors and windows or thru transoms. In each room an apron placed at the end of the duct, is operated by a chain. When the apron closes the duct, that particular room is shut off from the ventilating system. Opening windows and doors, therefore, cannot have any perceptible effect on the movement of the air in other rooms.

In this particular case I metered the air delivery thruout the building. Opening the windows of a single room did not make a measurable difference in the air delivery to the other rooms. Opening all the windows in the rooms controlled by one master duct made a difference scarcely greater than 6 per cent in the air delivery to the rooms supplied from the other duct. With a slight change in the construction of the air chamber there would have been no perceptible difference. Of about a score of buildings air-metered in only one did the opening of a window make a perceptible difference in air-movement.

In many buildings exhaust fans, instead of gravity and pressure, remove the breathed air. This method has much to recommend it over the ordinary plenum system. With exhaust fans metered to the work required, opening the windows and doors of the building can have no appreciable effect other than the acceleration of air-movements within the building.

As a rule, when they are installed the ventilating system of school buildings comply with legal requirements—in various states, thirty cubic feet of air per minute for each pupil. The official tests are made by higher trained mechanics; the system is operated in many instances by employes of the school department who lack the training necessary to get the best

results out of a system complicated with air pumps, vacuum tubes and thermostats.

In a certain building that came under notice the contractor had provided screens of suitable material placed in the air chamber to hold back the dust at the intake, which was at playground level. Three months after the fires had been started, the screens were in tatters and, shortly afterward, the frames had disappeared. In time, one of the exhaust fans became motionless and the air-exhaust was out of commission for nearly eighteen months. Doubtless this was an extreme case, but it existed. It is one of a number of illustrations that have led sanitary engineers to say many harsh words about the inefficient ventilation of school buildings. There is but one reason why the air delivered to school buildings is not as pure and a bit cleaner than the air of a June morning—namely, ventilating systems are not fool-proof.

### What About Temperature?

Very frequently it is stated as a gospel dogma that the temperature of a classroom should be kept uniformly at 70 degrees; quite a number of hygienists say 68 degrees. These temperatures, it is said, are the temperatures of bodily comfort. Such an assumption is nonsense. The temperature of comfort depends on the humidity of the air. Below is a table of results that represent the sensations of cold and comfort-warmth as determined from experiments made upon several thousand people. Granted that it is empiric, it nevertheless has value that the large number of people whose opinion it represents necessarily give value to it. The figures were collected by P. R. Jameson, an expert in physiological meteorology.

Rel. hum. 75 per cent—55°, very cold; 65°, chilly; 75°, comfortable.

Rel. hum. 50 per cent—35°, very cold; 50°, chilly; 65°, comfortable.

Rel. hum. 30 per cent—55°, very cold; 65°, chilly; 75°, comfortable.

Now it is not often that the humidity of the classroom is 75 degrees when the fires are a-going; but one may bank very safely on the fact that, at the beginning of the session the humidity is not higher than 30 per cent; more likely it is between 20 per cent and 25 per cent. Dr. Winslow has declared that the air of schoolrooms in winter is as dry as that of a desert. Tut, tut, Doctor: You will find the midsummer air of the Gila Desert infinitely pleasanter than the winter air of a schoolroom north of the Mason and Dixie line. Now the foregoing table shows that 65 degrees is the temperature of comfort when the humidity is 50 per cent; my own investigations show that with the humidity at 60 per cent a temperature of 67 degrees is about that of bodily comfort. All this goes to show that one cannot set an arbitrary figure as the temperature of comfort. It varies with humidity.

### Effect of Stagnated Air.

Still another factor must be taken into consideration, namely, variability and air-movement. Dr. Ellsworth Huntington has shown by the analysis of a large number of hospital cases that slight changes in temperature and air movement are followed by a decreasing death rate; and that with a change back to fixed temperature and stagnant air the death rate again rises. On still broader scale it may be shown that with the stagnation of the air which accompanies a hot spell, the death rate in the United States takes a sudden jump. When General A. W. Greely was chief of the Weather Bureau he noted the same fact. I cannot quote

figures, as does Dr. Huntington so thoroly; I merely note it as an established fact, and if it applies to hospitals and to all out-of-doors, one may reasonably suspect that it might apply to schoolrooms.

One of the most mischievous notions that ever found a place in the theories about school hygiene is now going the rounds. It assumes as a fact that the air of schoolrooms is thoroly impure and vitiated; but declares that, if the air is kept in motion, all the badness is taken out of it. A more idiotic notion could not be conceived. A slight stirring of bad air certainly takes away a lot of the discomfort that it carries when still. Because it stimulates evaporation from the skin it is refreshing. But stirring bad air does not make it pure and wholesome; and why schoolmen who are quoted as educational authorities should hand out such senseless piffle is intelligible perhaps to themselves, but not to anyone else. Incidentally, no harm comes from keeping ordinarily pure air in motion.

Doctors Kenwood and Parkes note that air passing thru the heating apparatus of mechanical ventilation loses much of its freshness when compared with out-of-door air having the same temperature and humidity. Dr. Huntington has noted the same thing. In the last half dozen years the same question has been put to me many times. Why? The answer is easy. I don't know, but I would like uncommonly well to find out. Analyses have not solved the problem, and every explanation so far received has failed. A janitor once said that it was a case of "burnt air." Maybe he was right. I know merely that in passing from out-of-doors to indoors the air has lost something.

### FINING TEXTBOOKS.

Evelyn Bowen, Anoka, Minn.

One superintendent has an ingenious method of judging the condition of high school textbooks. Every fall, before giving out the textbooks, his office force examines each book and decides its condition. The condition is based upon the approximate age of the book. It is considered that a book, properly used, will last four years.

A slip of paper, upon which the probable age of the book is written, is placed inside the front cover, and when the book is loaned, the age, as well as the name and number, is recorded. From the age the value of the volume is estimated. If, at the end of the year, it is found that a pupil has slightly injured his book, he is fined; if he has seriously mutilated it, he is forced to buy it.

In figuring the price to charge him, allowances are made for one year's legitimate use of the book; hence, he has to pay four-fifths the original value of the book if it was new when first loaned to him, three-fourths its cost if it was one-half year old, three-fifths if one year old, one-half if two years old, and one-fourth if three years old. Four-year old books are simply classed as old texts of no value; consequently such volumes are neither sold nor fined.

In estimating the age of the book, no reference is made to its actual age; its condition is simply stated in terms of years. A book that has been so carefully used that it is merely slightly soiled on the edges is classed as a one-half year book even if it has been used one or two years. Books that show a little more usage, but which are still in excellent condition, are termed one year books, while fairly well-worn volumes are called two-year books. If the books have very weak bindings, as well as soiled or torn pages, they automatically become three-year books, providing the judge estimates that they can stand another year of wear.

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# Elimination of Pupils in a Small City

## A Long Term Study of Elimination in a Single System

Isaac Doughton, Superintendent of Schools, Phoenixville, Pa.

### Part II

In Part I of this paper the records of 3,574 children were grouped into composite tables to show the following facts: Number entering in each year, grade of entrance, grade of leaving, and cause of leaving, or number at present in each grade. It was suggested that a longitudinal section of the system would be desirable in order to study the life history of various groups as determined by the year of beginning grade I. Group A, that is, would begin grade I in 1907, be augmented by such pupils as entered school in grade II in 1908-09, and so on until the group in normal course should be graduated in June, 1919. Group B would have its birth in 1908, etc.

Such a longitudinal grouping of the children involved in this study includes only 3,173; for all the "irregular" cases, and all cases of children admitted to groups that had their birthyear earlier than 1907, (e. g. children admitted to grade II in 1907, or grade III in 1908, etc.), would not be counted. And since the present study does not attempt to consider the closely-related problem of retardation, no account is taken of the gains or losses in each group thru rapid promotion or thru demotions. All children are included, however, who were admitted to grades within the compass of the groups.

It is necessary at this point to make a correction. In Table II there appeared large accessions in grades IX and X. These were explained by non-resident pupils from contiguous rural and semi-rural districts that do not maintain high schools of their own. A few non-resident pupils have entered in the grades and for various reasons that need not be detailed have had their schooling largely in the town schools. Such children are classified with those of the town. Other non-resident children, however, being, for the most part, a select group, would affect the results disproportionately unless the records of other children in the schools from which they came were combined with those of the town schools. Hence the records of those non-resident children who entered the system in the high school are not considered in the tables that follow. These children number 154, leaving a net group total of 3,019.

In the original tabulations the distribution was first made of the total number, then of the non-resident high school pupils and finally of the net total. It is thought sufficient for our purpose here to give the net totals only, indicated in each table by the code letter C. The following tables take no account of retardation or acceleration. There is no evidence in them of how long it took to reach the present grades in school or the grade of leaving; and for those entering above grade I the presumption is that prior progress has been normal. A retardation study, would, of course, bring out the facts regarding their progress.

The following Table IV-C shows the distribution of the net total of 3,019 children by group and by grade of entrance.

This corrected table shows very small accessions in the high school.

It is reasonable to assume that moving families have a fair proportion of adolescent as well as very young children. The local private schools, moreover, have very little to offer beyond the elementary school except to a choice few. It is a safe conclusion, therefore,

TABLE IV-C. Net Distribution of Pupils Admitted by Grade-Groups.

	Grade and Group of Entrance.												Total
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	
A 1907-08	163	23	16	13	12	6	3	1	0	1	0	0	238
B 1908-09	172	19	16	10	20	7	4	4	2	0	0	0	254
C 1909-10	135	23	17	27	13	10	4	4	0	0	1	..	234
D 1910-11	140	16	18	17	9	12	2	1	5	2	..	..	222
E 1911-12	168	31	16	12	11	8	5	2	0	..	..	..	253
F 1912-13	184	26	8	9	11	8	5	0	..	..	..	..	251
G 1913-14	216	11	17	24	9	11	6	..	..	..	..	..	294
H 1914-15	167	13	15	13	15	9	..	..	..	..	..	..	232
I 1915-16	168	17	14	15	13	..	..	..	..	..	..	..	227
J 1916-17	193	19	24	13	..	..	..	..	..	..	..	..	249
K 1917-18	167	30	17	..	..	..	..	..	..	..	..	..	214
L 1918-19	156	16	..	..	..	..	..	..	..	..	..	..	172
M 1919-20	179	..	..	..	..	..	..	..	..	..	..	..	179
Total ...	2208	244	178	153	113	71	29	12	7	3	1	0	3019

that the chances are very much against the shifting child for continuing his education. The common experience is that the shifting child gets out of step with his group, becomes discouraged and leaves school to work.

When it comes to a study of elimination it is obviously unnecessary to consider all the groups included in Table IV-C. Normally group H, which began grade I in September, 1914, would during the present school year, be in grade VI, and its members, therefore, would by law not yet be eligible for employment certificates. The tabulation of the groups by causes of leaving or presence in school shows the following facts from groups A to M combined in the first six grades:

Cause of leaving	Groups A-G	Groups H-M	Total
	No. left	No. left	No. left
Death .....	22	4	26
Private schools .....	163	68	231
Removal .....	398	292	690
Work Certificates ....	87	1	88
Past 16 .....	19	0	19
Other causes .....	62	19	81
No. left .....	751	384	1135
No. now in school..	107	888	995
Total .....	858	1272	2130

Evidently the causes that have operated most in eliminating children from the schools of Phoenixville in the first six grades, are private schools and removals. The "other causes" given in the table (70 of the 81 occurring in the first four grades), are difficult to classify, but experience goes to show that they are in large measure removals; for in the instances where no cause is specified, the children usually have left town and teachers have simply reported them as having "left school." The present child labor law in Pennsylvania began to be effective in Jan-

uary, 1916; and prior to that time certificates were in many cases granted before completion of the sixth grade. Of the 87 cases given in the first column above, 56 left in grade VI, 29 left in grade V, and 2 left in grade IV. Of the 19 that had passed 16, 12 left in grade VI and 7 in grade V.

It seems reasonable to conclude from the data given in the second column above that in Phoenixville at the present time the tendency is to carry all children thru the sixth grade except for a small number that are sick or that die. It is indeterminable, of course, just how far the children that have left to attend private schools and by removals have progressed. The former are nearly all still resident and subject presumably to the same standard for employment certificates as the public school children; the latter have gone to various other communities and their progress depends, if still in Pennsylvania, upon how rigidly the same child labor law is enforced. It is reasonably certain, however, that nearly all the children of groups H to M have progressed or will in time progress thru the sixth grade. In view of this, groups H to M may be dropped from further consideration.

In Table V-C the groups from A to G are shown distributed according to grade of leaving as corrected for the non-resident high school children:

It is not evident from this table just why children have left in the various grades. In the following table, however, is shown the distribution of the causes of leaving among the twelve grades for the total of 1,259 children.

In the above table, as shown before, 87 employment certificates were granted for children that had not completed the sixth grade. Of

TABLE V-C. Net Distribution of Pupils, Group A-G, by Grade of Leaving.

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	Gr.	Total
A	5	7	16	10	27	33	43	22	25	15	12	2	17	234
B	10	10	12	15	23	39	34	32	30	11	6	2	..	224
C	1	14	13	14	46	22	41	19	18	4	0	..	..	192
D	3	9	10	20	24	21	34	19	14	5	..	..	..	159
E	9	18	18	11	23	25	45	12	5	..	..	..	..	166
F	28	24	11	14	18	19	25	1	..	..	..	..	..	140
G	38	14	13	20	28	16	14	1	..	..	..	..	..	144
Total	94	96	93	104	189	175	236	106	92	35	18	4	17	1259

TABLE VI-C. Distribution of Causes of Leaving by Grade, Groups A-G.

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	Total
Death .....	5	7	2	2	2	4	..	1	..	..	..	..	23
Private Sch. ....	41	19	21	20	39	23	13	9	5	2	0	..	192
Removal .....	36	52	57	70	107	76	44	20	34	6	3	..	505
Work Cert. ....	..	..	..	2	29	56	171	68	30	6	0	..	362
Past 16 .....	..	..	..	..	7	12	2	7	19	19	12	2	80
Other causes ..	12	18	13	10	5	4	6	1	4	2	3	2	80
Total .....	94	96	93	104	189	175	236	106	92	35	18	4	1242
Graduated .....	..	..	..	..	..	..	..	..	..	..	..	..	17
Total .....	94	96	93	104	189	175	236	106	92	35	18	21	1259

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these, 70 were for children in groups A to D, and were granted before the present child labor law became operative; and 14 in groups E to G were granted for children in the sixth grade, probably all repeaters. From this it is clear that the two principal causes of final elimination ("past 16" and "work certificates") become potent in the seventh grade and continue powerful thru subsequent grades. A serious leakage thus occurs in the seventh grade and is continued in the eighth and ninth grades. Those who keep on with their school work are survivors of a very real process of elimination; but whether it is a "survival of the fittest" is a question that is full of doubt.

These withdrawals fall into four classes: (1) withdrawals by "death"; (2) withdrawals by "work certificates" or being "past 16"; (3) withdrawals to attend "private schools" or by "removals," and (4) withdrawals for "other causes." From what has already been said, a large proportion of class four should really be assigned to class three; some of the cases were of sickness that resulted in death; and some, if the real cause were known, would probably fall in class two, or represent similar causes to those of class two. In order to trace out survivals in the following tables three-fourths of the cases in class four are transferred to class three, and the remainder (because of the small proportion of deaths), are transferred to class two. This gives the distribution of the children whose school history is known to have terminated in the schools of Phoenixville or to be still continuing, as well as those whose school history was probably continued elsewhere. Such a distribution follows in Table VII-C.

Item 5 of this table is evidently the only one that reasonably tests the Phoenixville schools. Taking this group as a whole 23 or 2.3 per cent have died; 460, or 46.5 per cent have left for work or have past 16; and 504, or 51.2 per cent are still attending.

Gross totals, however, carry little meaning in

TABLE VII-C. Distribution of Causes of Leaving or Presence in School, Groups A-G.

Cause of Leaving	A	B	C	D	E	F	G	Total
1. Death .....	3	4	4	2	5	...	5	23
2. W. Cert. and Past 16..	124	104	77	60	55	28	12	460
3. Total of 1 and 2.....	127	108	81	62	60	28	17	483
4. In sch. or grad. ....	21	30	42	63	87	111	150	504
5. Total of 3 and 4.....	148	138	123	125	147	139	167	987
6. Priv. sch. and rem....	90	116	111	97	106	112	127	759
7. Group total .....	238	254	234	222	253	251	294	1746

themselves, because of the varying numbers and groupage; and in order to make comparisons it is necessary to reduce all to a common base by grades and groups. Accordingly, in Table VIII-C the distribution of the 987 cases of item 5 is shown for each grade and group on the basis of percentages of the total given in item 5 above for each group.

This table makes possible a study of the mortality of the various groups so far as concerns the class of pupils that have not left for private schools or removed from town. On this as a basis a survival table can be constructed to show the percentages of these sub-group totals that have completed each grade. These are found by subtracting progressively for each group the total percentages given in Table VIII-C. That is to say, on February 1, 1920, in Group A, if 0.7 per cent left from or were still enrolled in the first grade, 99.3 per cent of the sub-group total had completed this grade, and 98.6 per cent had completed the second, etc.

The boundary at the right of this table divides the expected attainment of any group and the grade in which the group shall normally be enrolled in 1919-20; or reading downward, it indicates the number of the groups that should

TABLE VIII-C. Percentage Distribution of Group Total by Grades of Leaving or Presence in School. Groups A-G.

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	Total
A	Death .7	.7	...	...	6.8	14.2	23.2	13.6	11.6	6.8	6.8	...	2.1
	Work, etc. .	...	...	...	...	...	...	...	...	...	...	...	83.7
	In Sch. .	...	...	...	...	...	...	...	...	...	...	14.2	14.2
	Total .7	.7	...	...	6.8	14.9	23.2	13.6	11.6	6.8	6.8	14.9	100.0
B	Death .7	.7	...	...	.7	.7	...	...	...	...	...	...	2.8
	Work, etc. .	1.5	...	.7	6.5	10.2	20.3	18.1	8.7	5.1	2.9	1.5	75.5
	In Sch. .	...	...	...	...	...	...	...	2.2	2.2	4.3	13.0	21.7
	Total .7	2.2	...	.7	7.2	10.9	20.3	18.1	10.9	7.3	7.2	14.5	100.0
C	Death .	1.6	.8	...	.8	...	...	...	...	...	...	...	3.2
	Work, etc. .	.8	...	.8	6.5	4.9	26.9	10.6	8.1	2.4	...	...	61.0
	In Sch. .	...	...	...	...	...	.8	4.1	2.4	8.2	17.9	2.4	35.8
	Total .	2.4	.8	.8	7.3	4.9	27.7	14.7	10.5	10.6	17.9	2.4	100.0
D	Death .	.8	...	...	...	...	...	.8	...	...	...	...	1.6
	Work, etc. .	...	.8	...	3.2	8.8	16.0	8.8	11.2	2.4	...	...	51.2
	In Sch. .	...	...	...	...	2.4	1.6	11.2	19.6	20.8	1.6	...	47.2
	Total .	.8	.8	...	3.2	11.2	17.6	20.8	20.8	23.2	1.6	...	100.0
E	Death .7	.7	.7	.7	.7	.7	...	...	...	...	...	...	3.5
	Work, etc. .	...	.7	...	2.7	4.8	23.8	3.4	2.0	...	...	...	37.3
	In Sch. .	...	...	...	...	2.0	6.8	10.1	10.9	29.3	...	...	59.2
	Total .7	.7	1.4	.7	4.7	12.3	33.9	14.3	31.3	...	...	...	100.0
F	Death .	...	...	...	...	...	...	...	...	...	...	...	...
	Work, etc. .	.7	...	...	...	5.0	13.0	.7	...	...	...	...	19.4
	In Sch. .	...	...	...	4.3	18.0	17.3	40.3	.7	...	...	...	80.6
	Total .7	...	...	...	4.3	23.0	30.3	41.0	.7	...	...	...	100.0
G	Death 1.2	.6	...	.6	...	.6	...	...	...	...	...	...	3.0
	Work, etc. 1.2	...	...	...	1.2	1.2	3.0	...	...	...	...	...	6.6
	In Sch. .	...	...	2.4	5.4	29.3	52.7	.6	...	...	...	...	90.4
	Total 2.4	.6	...	3.0	6.6	31.1	55.7	.6	...	...	...	...	100.0
Total	Death .5	.7	.2	.2	.2	.4	...	.1	...	...	...	...	2.3
	Work, etc. .3	.3	.2	.2	3.7	6.9	17.6	7.6	5.7	2.3	1.4	.3	46.5
	In Sch. .	...	...	.4	1.8	8.8	13.2	9.3	6.3	4.0	3.1	4.3	51.2
	Total .8	1.0	.4	.8	5.7	16.1	30.8	17.0	12.0	6.3	4.5	4.6	100.0

normally have completed any particular grade. For instance, on February 1, 1920, Group C should normally be enrolled in the eleventh grade, and Groups A, B, and C should have completed the tenth grade. Any pupils still attending in grades to the left of this line are retarded.

The irregular boundary thru the middle of the table divides the grades in which no members of the various groups are still attending and the grades in which some are still enrolled. For instance, of Group D there are none now attending below the sixth grade, but some are still enrolled in the grades from the

which may be prompted by a dislike of school or maladjustment in school.

2. The enforcement of the compulsory attendance laws tends to keep all children in school for the first six grades except the few that die or leave thru extreme sickness, unless because of retardation they pass 16 years of age before completing this elementary period.

3. There is a serious loss at the close of the sixth grade of children old enough to work and somewhat retarded in their school progress; and another serious loss at the close of the seventh and eighth grades of children not so greatly retarded. (Ayres gives the fifth grade.)

4. While in the earlier groups 40 per cent of the children finished the eighth grade, it is probably true at the present time, if allowance be made for those still in school, that 55 per cent of the total number finish the eighth grade. (Ayres gives 50 per cent.)

5. From the experience of the two oldest groups it is warrantable to say that 15 per cent of the total number will be graduated. (Ayres says 10 per cent.)

6. If, however, the probably greater mortality of the private school and removal classes be considered and if the influence of the educational standard as set by the Pennsylvania child labor law be allowed the conclusions reached by Ayres seem to hold in the application to a highly industrial community like Phoenixville.

Some educators do their best work getting advanced degrees; then they rest on their honors.

Punctuality—Promptness—Proficiency—three necessary qualities in school board members. Punctuality implies attending all meetings on time; promptness involves meeting every situation in the briefest time; proficiency implies both.

#### Conclusions.

1. The most evident causes of elimination in Phoenixville are desire or necessity to work,

TABLE IX-C. Percentage of Totals to Complete Each Grade. Feb. 1, 1920. Groups A-G.

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	Total still in school
A	99.3	98.6	98.6	98.6	91.8	76.9	53.7	40.1	28.5	21.7	14.9	11.5*	2.7*
B	99.3	97.1	97.1	96.4	89.2	78.3	58.0	39.9	29.0	21.7	14.5	...	21.7**
C	100.0	97.6	96.8	96.0	88.7	83.8	56.1	41.4	30.9	20.3	...	...	35.8
D	100.0	97.2	98.4	98.4	95.2	84.0	66.4	45.6	24.8	...	...	...	47.2
E	99.3	98.6	97.2	96.5	91.8	79.5	45.6	31.3	...	...	...	...	59.2
F	99.3	99.3	99.3	99.3	95.0	72.0	41.7	...	...	...	...	...	80.6
G	97.6	97.0	97.0	94.0	87.4	56.3	...	...	...	...	...	...	90.4

\*Graduated, 11.5 per cent; still in twelfth grade, 2.7 per cent; left twelfth grade without finishing, 0.7 per cent.

\*\*Still attending twelfth grade, 13 per cent.



# Happenings in Our School District

## A Country Schoolmaster

### The Serenade.

About three weeks ago I had a letter from Abe Turner who lives out in the Lazy A district. "You ought to be out here," he wrote, "Alf Martin has got stuck on the schoolteacher again."

Alf is a bachelor about 40 years old. His homestead is right by the schoolhouse. He used to be foreman of the Lazy A ranch before the homeseekers fenced up the range and put the cattlemen out of business. He is a good man,—hard working, of exemplary habits. His one weakness is schoolteachers. He has had six experiences and each time something has happened. The last time he was jilted by a schoolteacher, he knocked a fan off of John Sand's windmill; which all shows that he has a romantic soul altho a trifle vindictive.

Miss Korrie would have nothing to do with Alf, so to get even with her he took a month old calf away from its mother and tied it to one of the fence posts between his place and the school yard. The calf was lonely and every minute or two it would bawl for its mother. It had a clear voice, not shrill, but persistent and penetrating. All Wednesday and Thursday the school was distracted.

The clerk of the board went over and called Alf's attention to that section of the law which makes it a crime for anyone to interrupt a school in session. Alf told him to go ahead and arrest the calf.

"It's funny if I can't pasture an animal anywhere on my ranch I want to," he maintained.

This stumped the school clerk. He went to ask the trustees if something could not be done.

But Friday afternoon the noise stopped. Alf, who had spent the last three days brooding in the house, came out to see what was wrong. The calf's muzzle was covered with pea-green froth up to the eyes. Alf untied the rope, galloped to the barn with the calf and gave it a cup full of kerosene.

After school Alf met the teacher in front of his house. Neighbors a mile away heard him accuse Miss Korrie of poisoning his calf.

"I did not poison your calf," Miss Korrie told him. "It's voice seemed ready to crack. I put a piece of soap by the fence post so the poor thing could gargle its throat."

### An Unpopular Version.

Over at the Bourbon County Institute, Dr. Bates delivered one of the most unpopular lectures ever heard in this part of the country. It was well toward the close of the Friday session when everybody was in a hurry to have the election of officers done with so we could go home. The speaker's personality was not a pleasing one. His attitude toward his subject did not set well with a majority of thinking people who listened to him. Strange to say, Dr. Bates is considered one of the leading educators of his State in the East.

Altho as a country schoolmaster, I cannot agree with his opinions, I always like to get both sides of a question. While the election of officers was taking place I went to Dr. Bates and asked for notes on the most radical parts of his paper. He was so pleased with my interest that he gave me the whole manuscript. It is written on fools cap. The penmanship is so wretched that I have had great difficulty in making out the opening paragraphs. I quote him verbatim.

"It is not possible to lay one's finger on the trouble that exists between teacher and so-

ciety. The trials of modern education are often blamed on low salaries. Yet I believe that we should take this view only with reservation. It is too frequently the habit of the reformer to win a hearing by reciting the real or imagined grievances of his hearers.

"I am sure that if all teachers' salaries were doubled tomorrow, our problem would not be solved. Of course, low salaries have played havoc with our schools in more ways than one. Inadequate pay fills the classrooms with incompetent teachers; incompetent teachers give poor service; poor service brings us back to low wages again: It is a vicious circle. A break must be made by somebody. Why should not this somebody be the teacher?"

"Not a small part of our trouble may be traced directly to the teacher's door. Some men and women take up teaching as a sort of time-killer until they can get into something else. How can we arrive anywhere if people use our profession as a stepping stone, or should I say, a door mat?"

"There are many teachers who take their responsibility lightly. Miss Killup, the superintendent of this county, tells me that she had six teachers last winter who walked off on pay day, leaving their trustees and the children in the lurch. Some teachers break a contract at the slightest pretext. Others come to school tardy, day after day. Still others keep their schoolrooms as untidy as pig sties. Fortunately these cases are few but they are numerous enough to lower the moral tone of the whole profession.

"Present wages make it impossible for a large number of rural teachers to save money for a college education, but honesty, loyalty, sincerity, and unity of purpose are free to all and should be the foundation of all qualifications.

"The last few years have brought about a great awakening of society to its duty toward children. Already there is a well directed movement to put the teacher on a parity with the industrial worker. We can hasten this movement along. We can help to raise our profession to a high standing of dignity and respect. To do this we must command more active support of the public by diligent effort and eternal faith in our mission. \* \* \*

There is a great deal more to Dr. Bates's paper but the text is so blotted and blurred that I have never taken the trouble to decipher it.

### A Diversion.

As a usual thing, when a majority of the trustees are bachelors one can expect low taxes and poor schools. I have found this rule to hold good quite generally in our country, but District 64 is an exception.

They have what is conceded to be one of the best rural schools of the county, altho the man who has been chairman of the school board for the last ten years is a sheep herder—and a bachelor.

His name is Landy Langford. He is one of the real old timers in the Redwater country who well remembers the Old West. He came here way back in the eighties with a band of sheep which he herded along the divide between the Lazy A and the Bar K outfits. It took courage in those days for a sheep man to trespass upon a cattle range, and in doing so Landy showed himself of stubborn timber. It is said that those cattlemen argued with him, shot at him, set fire to his shearing pens, tried to stampede his sheep over a cut-bank. But Landy could not be driven out. He soon earned a reputation as a gunman with a direct, un-

swerving eye; and some of his old time admirers still delight in telling how Landy once publicly spanked the foreman of the Bar K ranch before eleven hostile cowboys.

Maybe the stormy experiences of his younger days prepared him well for the school board chairmanship he now holds.

Just why Landy takes so much interest in school affairs I cannot say. He has very little education himself. He seldom reads, and his ideas on school management are very simple. He has never been known to offer a single suggestion to the teacher, before whom he is diffident,—even shy. Yet often, of a Friday afternoon he likes to drop in, casually, and visit the school. On these occasions he sits in the back seat, taking in everything that goes on, without a word one way or the other.

The children got used to him years ago, so did the teachers. School goes on as tho he were not there, except that they sometimes have a few simple exercises, for Landy is immeasurably pleased to hear children speak pieces or sing.

Last spring District 64 had ten children who graduated from the eighth grade. Since that was about a third of all the graduates in the rural schools of the county, it speaks volumes for Landy as a practical educator. I heard that the teacher was going to have a program the night after school was out, so I went.

The room was richly decorated. They had borrowed some planks and had made a stage in the front of the room. The graduates sat in a semi-circle, with the teacher on one end, and,—much to my surprise,—Landy Langford, all dressed up in a new salt-and-pepper suit, on the other.

The children spoke very well. I am sure everybody must have worked hard to get that program ready. When the last one had finished the teacher stepped to the front of the platform.

"I am going to surprise you," she said. "I have coaxed and wheedled for the last six weeks to get the chairman to address you this evening. Since he is so well known he needs no introduction. I will now call upon the man who has acted on the school board ever since the district was organized, and to whom, more than to any other man, must be given the credit for what our school has accomplished. Mr. Langford."

Landy reared his angular body to its full gaunt height. He advanced to the center of the platform, visibly distressed.

"Friends and neighbors," he began, looking hard at a sheaf of papers in his hand, "the teacher has been pesterin' me to speak at this here meetin' after the children have spoke

"I ha'nt nothin' to say about schools that I ain't said a hundred times before. Educate the children, says I. Me, now, I don't have any to send myself, but I pays taxes the same as everybody. I'm bound to get my money's worth, says I. And the's no way I can see to get my money's worth unless we get the best school that can be got.

"You got to have nine months school every year. Less than that is crime. Nine-month term and a good teacher is the only way."

These were aphorisms Landy had repeated so many times that they had become a part of his religion. Now he launched into strange waters and the going was a bit harder.

"Things is mighty different from what they was when I was a little boy." (Here Landy dropped his pencil, and stooping to get it, discovered that it had rolled down a crack.)



"When I was a little boy about 10 years old,—why—er,—things was mighty different."

A ripple of merriment swept across the room to see Landy, for once lacking in poise. He looked hard at his notes, frowned at his audience, cleared his throat.

There was a sound of laughter outside; a clatter of feet on the porch. The door was opened.

"You go in first."

"No, you go."

"Ladies first."

"Sh. They're not done speaking yet."

It was the Lazy A crowd of young folks who had come late for the program but early enough for the dance to be held afterward. They stood by the open door, talking in subdued whispers, sniggering among themselves.

Landy, up on the stage, recovered his eloquence with a bang. He pointed a long accusing forefinger at the disturbers.

"Shut that there door," he bellowed.

So it goes. Whenever we get up to say something fine and inspiring, some brainless lout has to spoil it all by sniggering.

#### Tribute.

Henry Bell has left the farm and has moved to Antelope. I was rather surprised to hear this because Henry is a good farmer who seemed to be getting along very well where he was. There was a rumor that he had secret aspirations to become county sheriff but that is not the reason why he left the homestead as I learned the other day.

"Do you know," Henry told me, "I have tried to get a school out in our district that was fit for a child to go to, ever since I filed on my place, but there was always somebody buckin' me. I've got so plum disgusted that I've made up my mind to bring the kids in to town."

It appeared that there were not very many men opposing Henry. In fact there was only one. That was Gus Link, the chairman of the school board.

I guess the way they carried on at some meetings was something frightful. Henry was clerk, who of course had no legal authority, but the other two members assumed a neutral position and let Gus and Henry fight things out.

A deadlock occurred the night they were to hire a teacher and to make the annual tax levy. Henry Bell stood for getting a good teacher.

"You can't get nothin' for less'n a hundred dollars a month," he maintained, "Hir'in a poor teacher is like throw'in your money in the fire."

But Gus Link knew of several schools that expected to get teachers for less than that. He thought seventy dollars was plenty. He and Henry wrangled until nearly midnight while neutral members of the board yawned in their chairs.

"Look at the school out in District 64," Henry pointed out. "Old Landy Langford says they're goin' to pay a hundred and a quarter next fall. Them fellows have a good school every year just because they ain't afraid to let go of a nickle."

"Yes," Gus retorted, "but Landy is a sheep-herder, and is out of his head about half the time."

Shortly before midnight a compromise salary of ninety dollars a month was agreed upon. But when Henry proposed a full term of nine months Gus went up in the air.

"There's no call for a man to give a whole season's profits to school somebody else' children," he howled.

Henry was furious. He argued; he pleaded; he swore; he threatened to resign his clerkship, but Gus was adamant. Along about 2 in the morning, the neutral members of the school board suggested that they compose their difference, and go home.

"Well now, Gus," Henry said, "let's quit cussin' each other and settle this thing right."

"Well," said Gus, "I'll tell you what I'll do. I'll let you have your nine months of school, but you fellows that have children will have to pay for the last four months yourselves."

#### Higher Education.

Lars Larson is the young Viking who married the teacher of the Bar K school and thereby solved a knotty school board problem, as told elsewhere in this veracious chronicle. I had thought of him as a model of good nature,—kindly, open hearted, always accessible to reason; but the other night I discovered a streak of stubbornness in his make-up that quite surprised me.

He was telling about his brother's daughter, who recently came home from a finishing school back East; and who is now teaching music and elocution in the Bourbon County high school.

Lars is disgusted with finishing schools and soured on higher education generally.

"She was a fine singer when she laft here," he told me with a touch of Scandinavian accent, "but now when she sing she go 'Yip-yip-yi-ipp'." Lars imitated his niece's interpretation of grand opera.

"Some day," I said, irrelevantly, "I am going to sell everything I possess and go back to school again."

Lars's eyes opened wide. "You mean you sell your house and your car and spend it to school?"

"Yes."

"You think it pay?"

"Absolutely."

"Maybe so, maybe so." Lars smoked thoughtfully over the problem for a minute.

"I don't think it pay her," he said finally, "they say she only get tan dollars more than I pay my hired man."

"Oh, education cannot be measured exactly by dollars and cents," I told him. "Just think of the many things she has seen back East. She has learned new ways, new customs, new habits of thought, new styles of doing things."

"She sure got style," Lars conceded, "she sure vare nifty clothes."

"I don't mean clothes altogether when I say style," I told him. "Education has a broadening effect."

"You mean it viden out her brain?"

"Yes."

"Maybe so, maybe so."

"Yes. Education has a broadening effect. She has seen new places, got to know new people."

"I don't like this new people business," Lars objected. "They say she was ashamed of her pa when he went to see her last Christmas."

Further argument was useless. We relapsed into silence, and Lars smiled in his slow, friendly way toward his wife who was humming a nameless tune over her embroidery.

Somehow, all the way home I had a vision of a little boy who was caught making faces at some men digging a sewer in front of his house,—about twenty years ago. And my memory dwelt with sinful fondness upon a long, supple, and very instructive razor strap, which hangs in my father's library to this very day.

## The Salary Situation with Remedies

Arthur H. Chamberlain, Executive Secretary, California Council of Education

No more perplexing question confronts the school forces throught the nation than that of securing properly trained teachers for the schools. Everywhere it is the same. Teachers are leaving the service to engage in more lucrative undertakings. Many who have spent years in preparing themselves for the profession, find they can now step into other lines of occupation entirely new to them at a greatly increased base pay with sure prospects for advance, such as is better calculated to meet the demands of higher living costs. Under such conditions it is no wonder we are losing many of our best teachers. Half-day classes and overcrowding are the rule rather than the exception. Young and inexperienced teachers are gladly welcomed into the service, thus tending to undermine the present all too low professional standards. And teachers long since placed on the retirement list are drafted back to the classroom.

Recently in the city of New York a state school official told the teachers that the "schools thruout the state face a crisis due to the short-

age of teachers." He felt sure the legislature of the state would pass a measure looking towards salary increase, should the teachers unite upon a proposal not encumbered with detail such as tended to confuse. The opinion was expressed that a salary of \$1,407 was not sufficient for a grade teacher. Said this official: "It is not to be wondered at that teachers are leaving their chosen profession; that red blooded men and women hesitate to enter the profession." "You people," he continued (speaking to the teachers), "have got to get back of something reasonable, agreeable, and you must have a united front. You must have something definite and clear, something that will give every person, from the lowest to the highest, an adequate increase."

Under title, "Scuttling the Schools," an editorial in the Los Angeles Express recently said: "There is a one-hundred-thousand teacher shortage in the United States. There is reported no shortage of school children. Now plainly enough one of two things is going to happen.

Either intelligent young men and intelligent young women who spend years and money and energy in gathering information, culture and working power are going to receive compensation somewhat commensurate with that commanded by others of like skill and intelligence, or our public schoolrooms will be deserted by the most alert minded and capable teachers, and men and women will shun the profession by reason of the sacrifice involved.

#### Penalizing Teachers.

It may be said at the outset that the most distressing feature of the salary matter is the shortage of teachers. That the compensation of the teacher is so inadequate is a most regrettable fact. As a result of this, our communities suffer, and the children are penalized. Whatever may be said, therefore, of the need for salary increase, it must be recognized that the integrity of the schools is of first concern.

The danger to result from lower standards already too low, is one phase of our national menace. Thousands of well-meaning, but in-



competent teachers, are now certificated. Young boys and girls direct from the high school, or with barely the completion of grade school to their credit, are attempting to teach other future citizens as mature or well informed as they. With it all, there is no knowledge of teaching on the part of these young people. Only a small proportion of our teachers is trained—is professional. Graduation from a normal school or college does not guarantee us a professional teacher. A teacher must "practice as well as prepare." There must be constant improvement while in service. It is not too much to ask that the minimum requirement for any teacher should be two years in a normal or teacher-training institution, following graduation from a standard high school. In the United States we have never approached this standard.

Most of us have in the past fallen into error in arguing for increased standards on the part of teachers as a basis for and as preliminary to increased salary schedules. Rather, we must approach the matter from the standpoint of the business world. The possibility of attractive compensation will draw to the profession men and women of personality and of power, of proper training and qualifications, and we shall be able to retain these in the service of the schools. Professional standards will in some degree take care of themselves and weaklings and incompetents will automatically be eliminated from the profession.

The shortage of teachers is not a new thing. We have never had an adequate supply of trained teachers. The conditions have been growing worse for years. Teachers the country over, 350,000 in number (approximately one-half) possess less than the standard high school training. Today the normal schools have only 62 per cent of their registration of two years ago. The calling of teachers into other lines of service during and following the war, with the attendant attractive salaries, has served to aggravate the situation. The coming year will find us lacking 110,000 elementary teachers. The teacher training institutions will supply 30,000, leaving 80,000 for certification who have had only a high school training or less. Of 84,000 high school teachers, one-third will not return next year. The colleges will contribute approximately 9,000. We need, according to President Felmley, 70,000 or one-ninth of our teachers each year. To this number we must add each year 6,000 to take care of the natural growth.

#### Salaries and Living Costs.

In many particulars the increased costs of living have been greater for teachers than for many other groups of people. It is safe to place this increase during the past two years at 130 per cent. The \$750,000,000 now paid in salaries must be doubled. Secretary Houston of the Treasury Department is authority for the statement that there will be no noticeable receding in prices for some time to come. In New York state, the 25 to 27 millions paid annually in teachers' salaries is a 50 per cent to 100 per cent increase over that paid three or four years ago. Greater increases are now planned. The Southern states generally have come rapidly to the front. During the war there was tremendous increase in the value of production there, and agriculture became more varied. Thruout Mississippi, superintendents of smaller towns have been advanced to \$3,600 and county high school principals to \$5,000 and \$6,000, and in some instances house furnished. Supervisors in Massachusetts are receiving \$2,200 to \$2,500 and travel expenses. Commissioner Finegan points out that Pennsylvania was the first state to establish both a minimum standard for teachers and a minimum salary

with increments from time to time based upon meeting the professional requirements and growth in service.

Many excellent studies have been made showing by comparison the inadequacy of teachers' salaries. Especially is this true of teachers in elementary and high schools and in the rural schools. Along with these there should be included teachers in the normal schools, the county superintendents, and most superintendents even of city school systems, as well as the faculty members of colleges and state school officials.

Perhaps the institutions that have been the greatest offenders in the matter of inadequate salaries are the normal schools. Our best and strongest teachers are needed in our normal schools and other teacher-training institutions. Here, if anywhere, we must have teachers with proper training and experience; those who possess qualities of moral integrity, the teaching art, knowledge of subject matter and a well rounded view of the entire educational field. Such teachers can not be secured or retained at the salaries now paid. True it is that there are now and always will be self-sacrificing men and women of lofty motives and high ideals who, because they prefer teaching to any other form of service, will continue to grace the normal school.

The results of a recent study of salaries paid in the normal schools of California are suggestive and typical of conditions the country over. Assuming a twelve months' basis for salary schedules, the total average yearly salary for the 240 teachers in eight normal schools, exclusive of presidents (and including the Los Angeles institution in the period just preceding its taking over by the university), is \$1,797.36. For the regular teacher the average is slightly more—\$1,963.68. For the critic teacher, it is \$1,694.40. In Monterey county the average for high school teachers is \$1,651. The median for high school teachers the state over is \$1,694.17. This average monthly salary for normal school teachers, at the close of 1919, of \$155.50, is a blot on the name of California. While salaries in general have been higher in California than in most states, the same can't be said of the salaries of normal school teachers. That such conditions exist in any state and are more or less acute the country over, is owing, in no small degree, to the attitude of

those in charge of these institutions. A determination on the part of the administrator to handle the affairs of an educational institution in a business-like way, and with less concern for his own position than for keeping good men and women in the profession, would have made impossible the situation in which we find ourselves.

The need for well trained superintendents is imperative. Again, to use California as typical, a study of the salaries of twenty-five city superintendents shows an average of \$3,561.85 per year. Only four cities pay \$5,000 or more. Considering the salaries of the other 31 city superintendents, the average is \$3,164.68.

The average salary received by county superintendents of the fifty-eight counties of the state is \$2,041. In eight counties only, is the salary paid \$3,000 or more. The average for the eight counties in question is \$3,362.50. In two counties the salary on account of the superintendent, is \$200 and \$400 respectively. Superintendents in these counties are engaged in teaching. Leaving out of account the eight counties where salaries of superintendents are \$3,000 or more, and the two counties above referred to, the average salary for superintendents in the other forty-eight counties is \$1,893.29 per year.

Few of the small high schools pay their principal a salary less than \$2,500. It is not uncommon for a high school principal to receive \$3,000, and many such salaries run to \$3,500 or even to \$4,800.

In this connection it may be said that principals of elementary schools, and especially outside the larger cities, are decidedly penalized in the matter of salaries. Here again a more decent wage would soon react in raising the standards of professional training and in securing men and women of higher quality than many now occupying these positions.

#### Salaries of Rural Teachers.

Authentic data from forty-seven states on salaries of elementary and high school teachers in rural schools, year 1919-1920, have been compiled by Mr. A. O. Neal, of the United States Bureau of Education.

Three counties report for each state. For 8,581 teachers reporting the average salary is \$633.96.



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So that it would not be necessary for the children to leave the hotel at any time, and risk passing traffic in the streets, a school has been established atop a hotel in San Francisco, Calif. There are a kindergarten and primary classes. The children are shown studying in their novel classroom.



Lowest state average in any one state, \$351.

Highest state average in any one state, \$1,026.

1,900 teachers receive less than \$500.

5,632 teachers receive over \$500, but less than \$1,000.

383 teachers receive over \$1,000, but less than \$1,500.

46 teachers receive over \$1,500.

That the present low salary of the teacher is owing in no small degree to the value the teacher has placed upon himself, does not help in this dilemma. That the condition must be remedied is certain. Several things are necessary to bring about a remedy. These are: First, more state aid for schools; second, federal aid; third, publicity; fourth, teacher organization.

#### State Aid.

We have talked much of state systems of education. In point of fact we have in most states such a system in name only. There is all too little state support of education. The local community has been bearing the burden. For this reason there have not been equal opportunities thruout the state or country. In some wealthy localities there have been ample funds to carry on the educational work. In other localities the taxable valuations are low, and with large numbers of children to educate, the school facilities have been at a minimum.

There should be an equalizing of opportunities. Our people are just awakening to the necessity of more state support for education. There should be a minimum requirement set by the state, and funds sufficient to meet this requirement should be forthcoming. Over and above this, communities should be permitted to tax themselves to meet any additional demands they may choose to set. We must begin to realize that it costs money to conduct good schools; it is the state's business to conduct them properly, and the state should attend to its business. "No longer is education free," says Governor Harding. His slogan is, "All must be educated."

It is apparent that there must be a revision in our plan of taxation to meet the added demands forced upon us. In many localities the limit of taxation has already been reached. There must in many instances be higher valuations set, with revisions upward. City and county boards of education should have greater independent taxing power than now, with opportunity to appeal directly to the people.

#### Federal Aid.

National support of education is imperative. In the matter of education especially, arbitrary state boundaries must play less part than heretofore. This is not a question of depriving states of their rights. It is a question of a proper balance between local autonomy upon the one hand and centralizing of power upon the other. Just as in a given state, the more wealthy localities must lend support to the weaker, just so the wealthy centers from a national point of view must be made to contribute to the support of those localities less able to help themselves. Moreover, the federal government should insist that there be a minimum educational standard that all must reach, in whatever state the individual may reside, or in whatever environment he may be living.

#### Publicity.

The work of the teacher has been so long underestimated both by himself and by the public, that a nation-wide campaign for education is absolutely essential. Education must be "sold" to the people. Before this can successfully be done, teachers must "sell" the school to themselves. A salesman advertises his goods. We must advertise the public school in America if we expect to sell it. There has been for years a studied campaign of publicity for every business, profession, trade or calling in Ameri-

ca, save that of teaching. Teachers must believe in education, or they can not make others believe in it. There should be educational columns carried in daily and weekly newspapers. Every school system should have a "self-starting" group and every school its correspondent. Teachers should make it their business to place in the hands of local editors, important items or articles appearing in their educational journals.

According to Editor Alson Secor of "Successful Farming": "We are where we are owing to lack of publicity." In our present emergency every effort must be made to carry over to the public the need for trained teachers, for increased salaries for teachers, for more money to finance the schools. Posters may be made by high school students; essays may be written; local and state conferences may be held. Every editor may be reached by some one in the community. The Red Cross, the Y. M. C. A., the Y. W. C. A., the Knights of Columbus, the Salvation Army, and other organizations, have learned the lesson of publicity. Nor do they hesitate to pay for it. The Inter-Church World Movement spent one and a half millions for publicity to raise \$217,000,000. For lack of publicity, or owing to wrong publicity, the public has a distorted view of education. "We are," says Dr. Spaulding, "on the defensive. We are on the wrong track, facing in the wrong direction. Wrong pictures are being painted. The public looks with compassion on the teacher and on one who wishes to enter the profession. We should play up the needs and rights of children instead of pitying the teacher and looking upon her with compassion." We need a campaign of publicity to dignify and glorify.

#### Teacher Organization.

The significance of the value of organization is slowly, but surely, finding its way. Teachers have been slow to appreciate the value of standing together. Organization is at the very base of publicity. To make any national, state, or local campaign a success, teachers should come together in a united effort. At this time especially, petty matters and trivial differences should be thrown in the discard. All should unite on the big fundamental issues. Upon the proper conduct and financing of the schools, and the adequate preparation and improvement of teachers, it should be possible for all to agree—teachers in rural, town and city schools, high school and college teachers, principals and superintendents.

Teacher organizations, local, state and national, have been long in coming. The events of the past few months, however, have shown not simply to the teachers, but to the public at large, many of the weaknesses in the profession, owing to the lack of cohesive organization. By standing together for a common cause, and that common cause the children and the schools, there will be no question whatever as to proper support for education, and increased salaries for teachers.

The remedy for the salary situation was suggested at the Washington conference. There was a distinct note of optimism everywhere, an aggressive tone heretofore lacking at such meetings. From South Carolina came the ringing challenge: "We must get away from 'Cheap John' ideas of education and pay for what we want." The country is amply able to pay when returns are adequate. We rejoice in the statement of Dr. Albert Shaw, that we "Must meet the present menace in the way we met the menace of war three years ago—with the means adapted to the ends desired. That the profession of teaching shall not decline, we must meet the situation, not with palliatives or extemporizing, but with bold policies."

Even today in our extremity there is a tendency on the part of many to play up that already over-worked argument of the sentimental side of teaching. There are emphasized the compensations other than a monthly stipend, as, for example, the teachers' pension or retirement salary, such as we find in force in many states. No wonder those teachers who have been on the retired list desire to return to the profession, as the amount granted in retirement is entirely inadequate. Then, again, the type of education itself possessed by the teacher is spoken of as an asset. This, when once secured, can not be taken away. Those who advance this argument are having it brought home to them that teachers will not spend years at great expense, in securing an education to the end that they shall receive a much less financial reward than would come to them by engaging in some other line of work requiring much less time and preparation, and scant outlay of money. And, added to it all, the responsibilities upon the shoulders of the teacher are much greater, and more wearing than are placed upon those who occupy most other positions. We have repeatedly pointed out the fallacy of arguments that ignore salary as fundamental. Teaching may never be as profitable financially as business, or certain of the professions. Teaching will never be developed into a permanent profession until the financial returns are such as to attract and retain that type of men and women now heading elsewhere. The professional side and the financial side are inseparably tied together.

After all, the needs of the schools, rather than adequate pay for teachers is the telling argument. Education is a matter of state concern. The schools belong to the people. It is time to go openly and directly to the people for an adequate financing of their schools. Salary increase, from its minimum demands, should be safeguarded. We have often said that a teacher is either worth more or less than she is getting. In other words, it is wrong to penalize the good teacher because some of those in the profession are weak or incompetent. It is to be hoped that it will not be necessary to enact laws for the establishment of minimum salaries. An amount equal to \$1,500, however, should be the minimum for any teacher anywhere. Only as teachers are paid can we hope to secure men and women to carry on the profession. Professional standards should so be increased that sound men and women will know that teaching is a profession. The California plan of going direct to the people with an initiative proposal for a constitutional amendment to provide money for the schools is the plan adopted in some other states. And the people will listen.

But if we are to do away with teacher shortage; if we are to attract high grade men and women to the schools; if standards are to increase, we must now cease to talk salaries, as such, and talk, instead, the financing of public education. No longer do we need to strike comparison of the wage scale for teachers with that of the scrub woman, the hod carrier, the plumber, the carpenter, the day laborer. Such comparison was necessary in the beginning to attract public interest. Teaching must, as a profession, rest upon those who remain in it. The talk of a "living wage" is no longer to be tolerated.

Moreover, any system is inadequate which would compel an excellent teacher of a primary grade to seek a high school position in order to secure a living salary. Teachers should be paid for the services they render the community. If there are other public servants or private employees whose services are of greater worth, we are ignorant of the fact.



# PROPER RELATIONS OF HELPFULNESS AND COOPERATION AMONG SUPERINTENDENTS

Avis

(Part I)

The head of any kind of school may be referred to loosely as the principal. However, there are many sharp differences between the work of a town or city superintendent, that of a county superintendent, and that of a principal of a high school, consolidated school or grammar school, these differences should be kept clear in our own and in the public mind and the titles should be kept straight.

This discussion is from the viewpoint of a superintendent of town schools. It has much in common that can be adopted or adapted to the cases of the heads of other kinds of schools. It is intended to be suggestive, to be developed by the reader to his own needs.

To have proper relations of helpfulness and cooperation, we must:

Foster the highest ideals and hold fast to the best professional ethics, in every relation. No other way gives decency, safety, happiness, self-respect, or permanent success.

Keep to an ironclad rule never to speak ill of any other schoolman, and never to comment unfavorably on his work, his ability or his character. Such comment hurts the profession.

Praise the other schoolman when he is mentioned. If we cannot find something in him to praise, say nothing. Avoid all gossip. Gossip cheapens and discredits its peddler, and harms both him and its victim. It does not pay.

Never underbid. Never do anything to aid in lowering the salary of any kind of position, whether a superintendency or teaching place. It takes long labor to build up a good position and such administrative work should not be lost.

Urge higher salaries whenever we can do so effectively. It is a duty. No other way leads to good schools for the state.

Be careful that no professional right is imposed upon or lost. We must be worthy of the respect due our best traditions of a noble and dignified calling, and see that it is given. Otherwise every member of it is hurt, and the schools and the public likewise suffer finally.

## The Superintendent Is the School.

Keep in mind that, however strong or weak he may be and however good or bad the schools, the two are so closely associated in the public mind that *the superintendent is the school* and *the school is the superintendent*. Whether fair or not, the fact of this identification cannot be escaped. He is held responsible for things over which he sometimes has no control. He personifies everything even remotely touching the whole school system which annoys or antagonizes anybody, in it or out of it, and is hated and attacked accordingly. It is his fault that paper is scattered on the playgrounds, that a teacher has the toothache, that taxes are high, that a feeble-minded parent has added one more defective to the population sixteen years ago. Likewise, his personal enemies hate and attack the schools, thinking thereby to injure him because they are his schools.

Have always one great aim, namely, *Better Schools for the Children*. To secure these, right now our three biggest jobs are:

- (1) To get better teachers in those re-elected and those new.
- (2) To get better working conditions and equipment for them.
- (3) To get better salaries for them.

Therefore, insist that all personal applicants

interview the superintendent, submit their qualifications and records in writing, and seek a place on their merits judged fairly according to strict professional standards.

Insist that inquiries and applications be handled by the superintendent. The board will be glad to drop into this habit. All teachers should learn to address the superintendent on such matters. The novice should be taught in college, and the veteran by experience, that places should not be sought by appeals to the "influence" of a board member, preacher, prominent citizen, or brother-in-law. Any real teacher should scorn such methods.

Get the board to suggest proper methods whenever relatives or friends of applicants try to see them and to get a promise to give a position because of friendship, business, or political obligations.

Investigate all new applicants, carefully, by direct questions to school officials and responsible people where they have taught. The superintendent owes this to his public, and if he neglects it will soon find that he owes it to himself.

Answer the other superintendent's inquiries promptly, candidly, and accurately. Such communications should be held as business, personal and strictly confidential, if desired.

## The School Board Chaser.

Be careful of the recommendations we give, as well as of those we read from others.

Refuse to train or to tolerate board-chasers among the teachers. Bring matters to an issue with any teacher who spies or criticizes and with the board member who influences her. Do the same with any teacher who hankers to do business direct with board members when it should pass thru the superintendent, or to use pull, politics, influence, personal or social methods to get favors or positions. An experienced board-chaser is usually incurable and can never be trusted. A meddling board member, on the other hand, frequently gets into so much hot water that he reforms; failing that, the superintendent must see to it that he reforms.

Refuse to use such methods ourselves. A superintendent is headed for failure when his attitude is servile and toadying, or when it is hostile and bumptious, toward the board. Board members, if worthy, are due the personal, business, and professional respect of gentlemen. So are superintendents—no more, no less, either way. They and we are earnest fellow workers in a great cause. Assume this attitude and act accordingly. The delightful associations of strong personal friendship are very likely to follow.

Take care not to spoil or disgust board members of any kind, whatsoever.

Tactfully inform board members about ethics. They should learn to keep certain school matters as business confidences, to keep their wives from meddling in school affairs or spreading news of school board meetings, to rebuke board-chaser teachers, to represent the school instead of encouraging a complaining patron in further mischief, to boost the schools, to scorn the applicant who addresses the board direct without first addressing the incumbent superintendent whose place he is trying to get by hook or crook, to know that the superintendent never criticizes the board or its members out of meeting and that he should receive the same

treatment on their part, and to realize that no one member should give directions without board action.

Refrain from writing to the other man's board about a position or any other trumped-up subject designed to impress them. We should not seek acquaintance with his board members when visiting in his town. We know that it is far more pleasant and decent to visit him, call and pay our respects, or at least greet him over the telephone. He is the incumbent.

## A Proper Division of Duties.

Insist that professional and technical matters be kept in professional hands. Keep members from taking over our rights and prerogatives, and see that we do not take over any of theirs. Usually ignorance of the proper division of duties causes friction, and we owe it to everybody to inform board members along these lines, if they do not already know. Then we shall not inherit difficult and inefficient boards.

Keep sectarianism, lodges, politics, and pull of all kinds out of school matters. However excellent otherwise, they make trouble when they enter into the selection of teachers, purchasing of supplies, awarding of contracts, etc.

Give our part to the other superintendent, be it advice, help, information, courtesy. He should be our best friend.

Show the visiting schoolman, especially from a smaller position, the best features of our schools. It develops him, as well as gives genuine pleasure to visitor and host.

Find out in turn what is being done in good schools elsewhere, and use what we can for improvement.

Answer questionnaires promptly, for the other schoolman needs information in a hurry for something he is trying to accomplish.

Let the final test in the selection of any teacher be: "What will be for the best interests of the children to be taught?"

See that requirements, elections, promotions, assignments and salaries are based on merit and qualifications judged fairly by professional standards. The superintendent, aided by such direct or delegated means of information as he may see fit to use, must be the judge.

Face the issue if any applicant tries to get or to retain a place by ignoring any of the above principles. The superintendent should nominate all teachers, whether new applicants or those seeking re-election, before they receive any consideration or action by the board.

Face the issue if a popular and influential, but inefficient or disloyal teacher must be dropped.

## Defectives Must Be Removed.

Train teachers in professional ethics. Most young teachers have had no opportunity to learn; a number of the older ones may be in the same fix. Any who lack professional spirit or continue to violate ethics, must be forced to observe such matters or leave. This is particularly true of experienced teachers. Root out the indolent, gossiping, jealous, disloyal members of the force. If all superintendents did this, many administration troubles would cease.

Let teachers know that nothing counts but merit. All right-thinking teachers will welcome this and prefer to be judged by professional means. All others must be dropped.

Support and protect the teachers and principals, and give them the best working conditions we can. Thus we help the child, the



school, and incidentally the man who may succeed us or who may employ one of our teachers elsewhere.

Many states have provided for sub-normal pupils, but in some it is still necessary to protect the profession against those who would foist upon it the care of defectives. Teachers should not be responsible for feeble-minded, degenerate or criminal pupils.

No teacher should have imposed upon her a defective pupil who takes ten times as much trouble to teach and control as the normal child, or be judged by her failure with him. Despite false sentiment and the ignorance of the public, the rights of such an unfortunate child could not reach far in the schools.

Insist, then, upon special classes and special teachers for such abnormal pupils. If someone is bent upon keeping in the schools offsprings that requires the entire attention of one teacher, see that the conditions are known and that teacher is added to the force to teach the rest of the class. Up to a certain point covering mere dullness or defects that may be remedied, the special teacher in a special room can handle a few cases.

Some states seem to have provision for abnormal, yet the machinery of their laws is not such as the schoolman can use to remove children of influential people.

Insist on the removal from the schools of the worst cases of abnormality, degenerates and juvenile criminals.

Support the State Teachers' Association, and encourage our teachers and board to do so. Particularly, support the allied meetings of superintendents and principals.

Believe in our fellow superintendents of the state. They are worthy of our respect as men and of our affection as friends.

Seek out and develop talent among the younger members from smaller positions, at the state meetings. Such encouragement pays. It is democratic, constructive, a duty to the schools, and will insure ten years from now a larger number of better schoolmen than we show forth today.

Work for better and more constructive school laws, in an effective way.

Work for better school spirit and better understanding of the schools by the public. If the people of any state knew today what the superintendents of that state know about school conditions, they would furnish all the laws, money, and support needed, *at once*.

Hence, we could be more helpful to each other if we had better facilities for publicity. Many matters of good school practice are so plain to

us that we cannot realize that the public is ignorant of them; our school spirit is so fine that we cannot understand the spirit of the citizen who does something that hurts the schools. Yet many such matters are not known beyond our professional meetings and our school periodicals, in a state full of parent-teachers' associations and newspapers. Should we have a publicity or press bureau? Should we bear the expense of such effort for improving the schools and the state? Should this all be handled by or thru the state department of education? Should the making of educational sentiment and law and practice in the state be left to the patriotism of well-meaning but busy editors, the earnest but sometimes misdirected efforts of citizens who are not in all cases familiar with modern schools, the unaided efforts of well-informed citizens, and the very dubious and uncertain activities of politicians? Undoubtedly the initiative for better schools and the burden of the fight rests upon superintendents. The schools will not rise above their heads. Hence, possibly this publicity should be given mainly by superintendents; whether thru an organ of their own or one provided for them, either thru the state department of education or under its direction.

#### NIGHT SCHOOL TRAINING HELPS SIXTEEN IN A ROW.

Just what three energetic mothers, thru the help of the public night schools in Chicago can do in the matter of clothing their little ones at the least expense is shown by the accompanying illustration. These children are all wearing clothes that were made by their mothers at the night school. Two sisters and their sister-in-law, alarmed at the rapid rate at which the bills for children's suits and dresses and undergarments piled up, persuaded their husbands to



THE THREE MOTHERS OF THE SIXTEEN CHILDREN. Left to right: Mrs. John Perry, Mrs. Jos. Perry, Mrs. Thos. Penn, Chicago.



THE THREE MOTHERS OF THESE SIXTEEN CHILDREN MADE THE DRESSES AND SUITS THEY ARE WEARING IN THE LANE EVENING SCHOOL, CHICAGO.

stay at home in the evenings with the children while they went to the Lane night school and learned what they needed to know about making children's dresses and other garments. The three husbands dutifully agreed to take care of the sixteen lively youngsters, and the three wives made the most of their opportunities at school by proving themselves star pupils. As a result of what they learned about cutting and fitting, they were enabled to cooperate with one another in making clothes for each of their sixteen children. Whenever it was necessary, the particular child whose clothes were being made was taken to school and the fitting was done as part of the class work. The mothers used their old garments to good effect in providing materials for the little skirts and suits, often making a decided saving, as for instance in the case of the boy's suit that called for merely 15 cents' worth of thread and was worth \$15.

#### THE RUSSELL SAGE FOUNDATION RATING.

The educational rating of the several states in the United States, made by Dr. Leonard P. Ayres of the Russell Sage Foundation, giving Montana first place and South Carolina last place, has raised a lot of newspaper comment. While some of the state school officials have ignored these comments, others have freely given vent to their feelings and have assigned various causes to the unfavorable rating received.

Massachusetts, which is given ninth place, accepts the dictum philosophically and says: "Let us abandon complacency and take measures to regain our former high standards."

Indiana is disappointed. "Too much politics" is assigned as the cause by the newspapers.

New Hampshire is hopeful. The Manchester Union says:

"It must be borne in mind, however, that since 1918, New Hampshire has enacted legislation classed as among the most progressive steps taken by any of the states for school improvement. There has been a demand for better educational facilities and the state has set about meeting it. We have made progress, and we are going to make more. Incidentally, the relative standings recorded by the survey may help to an understanding of the manner in which the states have been meeting their common problems."

Maryland regrets being placed thirty-seventh and the Baltimore American holds that the state superintendent now has a good sized job to bring Maryland up to Montana's standard. The Youngstown, O., Telegram admires the

(Concluded on Page 96)





FRONT VIEW, ROBERT T. LINDBLOM TECHNICAL HIGH SCHOOL. A. F. Hussander, Architect.

## RECENT CHICAGO SCHOOLHOUSES

A. F. Hussander, Architect of the Board of Education

From whatever angle it may be considered the school building is first and last the tool or instrument of the school and its sole purpose is to provide proper housing for the school so that the latter may most efficiently and comfortably carry on the work of education. When the school building is considered in this light its planning and design is considerably simplified and irrelevant and improper motives for the introduction of certain features or the omission of necessary facilities readily are overcome.

The modern American school building and the schoolhouse of 25 or 50 years ago are as different as the latter was from the proverbial log upon which Mark Hopkins sat. The idea has long been discarded that the schoolhouse should be a place for instruction in the three Rs only. A glance at the school practices of any community will readily show that the public demands the use of school buildings for every purpose that in any way will advance their individual or community interests.

Medical examination of our soldiers and sailors during the recent war developed surprising information concerning physical defects and a lack of physical development which could easily have been corrected by proper physical training in the schools. The recognition of this fact has caused the slogan "A sound mind in a sound body" to be advocated at the present more urgently than it ever has been in the past. The schools are giving increasing attention to physical development and a high school is hardly complete without a gymnasium and an athletic field, and in some instances even a swimming pool.

Education in vocational subjects is rapidly increasing in importance. The various federal and state laws enacted during the past five years have emphasized vocational work and school buildings must now include shops and work rooms to a greater degree than ever before. The vocational subjects have annually increased attendance in the high schools so that these must be erected in increasing number regardless of increased costs.

Many citizens and even some school board officials do not realize the essential necessity of proceeding with school building construction. In the large cities the process of planning and erecting new school buildings and of replacing such part of the school plant as has obviously outlived its usefulness is and necessarily must be a continuous process. In small communities the need for additional space and new types of school facilities must be similarly met by immediate planning and construction. The reasons are obvious and simple.

People may live in an old home for one year or two years, or even longer, without suffering

any serious inconvenience or discomfort and without harming themselves. The erection of business buildings can frequently be postponed without financial loss and the planning and construction of many public improvements, the construction of new roads and city and county buildings can be pushed off into the future without interference with the efficiency of the government or the convenience of the public. Education, however, cannot be postponed. As small children grow into school age they must be immediately enrolled in school and their education must proceed with the greatest possible expedition. The years of compulsory school attendance are all too brief and the time is altogether too precious for the individual welfare and for the safety of the state to have education interfered with by a facility that is so easily supplied as is schoolroom space. When the efforts of school authorities are considered in the direction of preventing retardation, of utilizing most scientific methods and, of introducing the best types of curricula, the lack of adequate classroom and workshop space becomes almost criminal.

### The Modern High School.

The planning and erection of elementary school buildings is a simple problem as compared to the planning and erection of buildings for secondary education. The curriculum of the elementary school has changed but little during the past generation and while the function of the school has broadened somewhat and the buildings are put to many community and civic uses, the classroom unit has remained almost the same and the supplementary rooms have been comparatively simple and easily managed. Auditoriums, gymnasiums, and shops have been generally of the simplest type and have not involved problems that are equal to those produced by similar facilities in high schools. The essential problem in the elementary school has been the simplicity and directness of plan and utmost economy in space and general utility.

The high school, on the other hand, has grown enormously in the breadth of its function and the high school building has accordingly become a complex and highly organized structure. The high school building of the present day comprises under one roof practically all of the departments of a large university with its many buildings scattered over a large campus. Each high school building is a problem in itself and no single plan will meet any two situations. No two communities, large or small, are so nearly identical that one plan will successfully serve both. Even in a large city where the course of study is uniform for all the high school units, there is the widest variety in the requirements for the several buildings, and careful study and

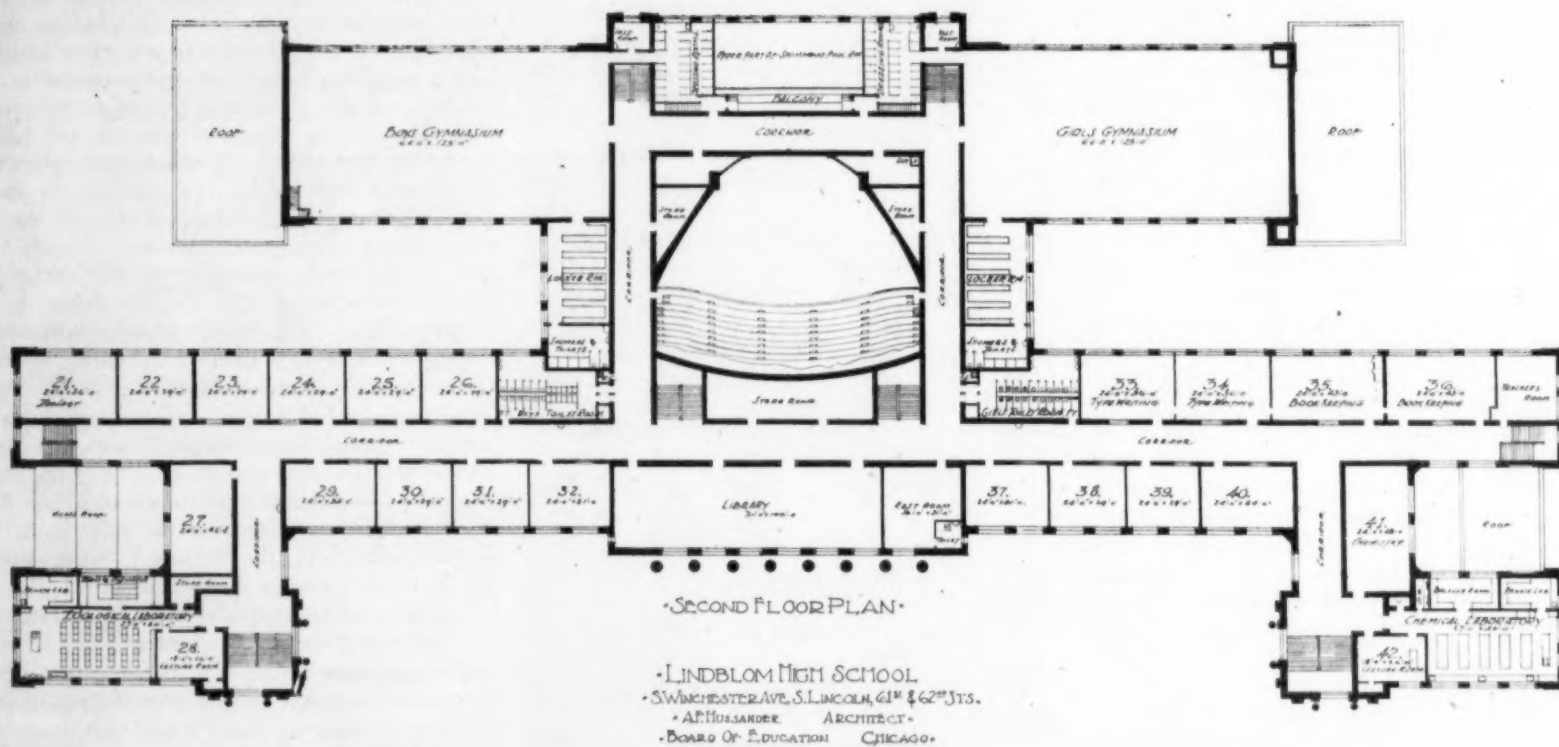
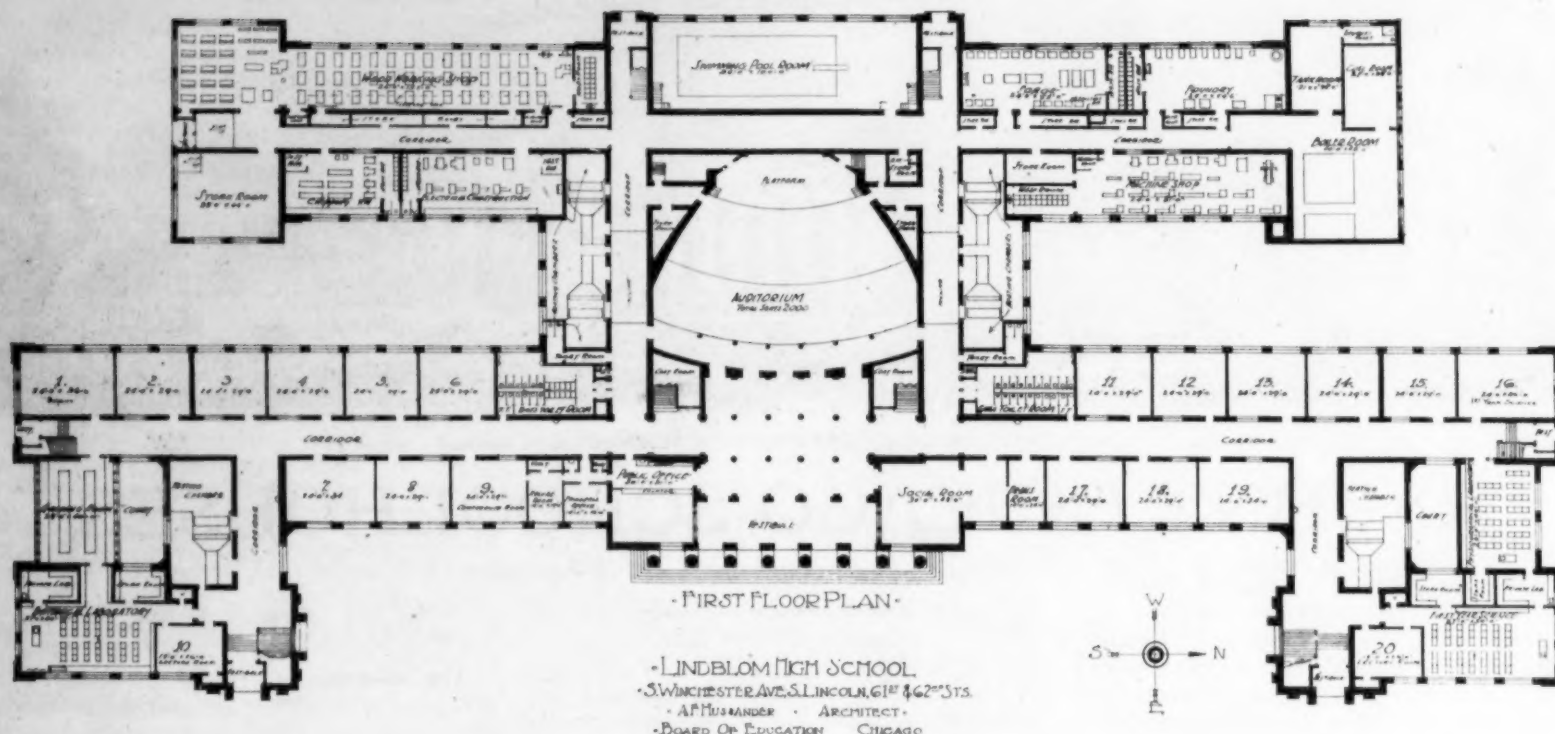
planning are necessary to get a satisfactory building in each particular district of the city.

The difference in the high schools of a large city are due in part to the neighborhood or district which each building serves and in part to the policies and methods employed by the principal and the faculty. Thus in Chicago one of the high schools is located in a district in which the people are largely of one nationality. A majority of the pupils enter commercial courses and the number of pupils enrolled for laboratory work and shop work are exceedingly small. In another high school the principal is an ardent advocate of vocational work and the students who live in the district come largely from families in which the parents are engaged in mechanical occupations. In this school it has been necessary to provide a large number of shops and laboratories and to constantly increase the proportion as additions have been necessary.

No high school building can be erected without the utmost cooperation of the educational authorities. The superintendent of schools and his associates on the supervisory staff, the principal and his associates in the classrooms, the school board and the architect, form groups which must coordinate their work if a school building is to be properly planned to meet the needs of today and of the future.

The members of the school board, as trustees for the people, are charged with the responsibility of providing adequate school buildings best suited to the needs of the community. They have as a special function the duty of keeping building operations within the limits of the funds available, and it is their duty to be the final judges of every school building project with the two problems just mentioned in mind.

The superintendent of schools thinks and works essentially in terms of school promotion and improvement. It is always his hope and desire to have each new school building include all of the desirable features which he has seen in other schools and a few added features that especially meet his ideas of a perfect and complete school building. The principal and the faculty of every school share very much the attitude and spirit of the superintendent. They can see absolutely no justice in the conservative attitude of the taxpayer who must ultimately foot the bills. The architect stands naturally in the position of the practical planner who must harmonize with demands of the educational authorities, with the financial ability of the board of education, and his success as a planner and superintendent of construction may well be gauged by his ability to satisfy most perfectly the educational demands with the funds which he can obtain.



On the present and subsequent pages are reproduced some illustrations of recent school-house work in the city of Chicago. With the exception of one building, which it is hoped will shortly be advertised for bids, the several schools are completed and in use. They represent a careful effort to meet all of the educational demands of the Chicago school system for housing the school units which are located within their walls.

#### The Lindblom High School.

The Robert Lindblom Technical High School is one of the newest high schools of Chicago and was completed and occupied for school purposes in September, 1919. The building occupies an entire city block with a frontage of 598 feet and a depth of 265 feet.

The building was designed during the administration of the late John D. Shoop, superintendent of schools, who took a very deep interest in the arrangement and construction of the building. Mr. Shoop made extensive studies of large high schools throughout the country and considered the Lindblom school one of the best of modern high schools. The building is entirely fireproof in construction and is three stories high. The exterior is of light gray brick with

Bedford stone and terra cotta trimmings. In addition to classrooms it contains very complete suites of laboratories and shops, two gymnasiums, and swimming pools, offices, study rooms, work rooms, and an assembly hall seating 2,000 persons.

The pupil capacity of a high school building is one of the unsolved problems of school architecture. A building containing a given number of rooms, shops and laboratories may be operated for a limited number of hours per day on a formal program that permits of satisfactory handling of only 2,500 pupils. The same building may take care of 3,000 or even more pupils by lengthening the school day and by making comparatively simple changes in the program. In other words, a good deal of the usefulness of a building depends upon the principal and his associates who so arrange their program that every pupil-station works during the greatest number of hours of every day. The Lindblom High School has been planned for 2,500 students but easily accommodates 3,000. In fact, its present enrollment is considerably in excess of the minimum.

The auditorium forms the nucleus of the building and is located in the center so that it is

accessible from all portions. The foyer forms the central entrance vestibule and lobby for the entire building and has been made as imposing as its importance deserves.

The classrooms, study rooms, laboratories, library, drawing room, and the administrative offices have been located in the east half of the building which constitutes the main front. The gymnasiums, shops, swimming pool, music room, and other noise-producing departments of the school, and the power plant, have been located in the west wing which is properly the rear of the building. This segregation of departments avoids the confusion caused by the noises and the dust in shops and gymnasiums.

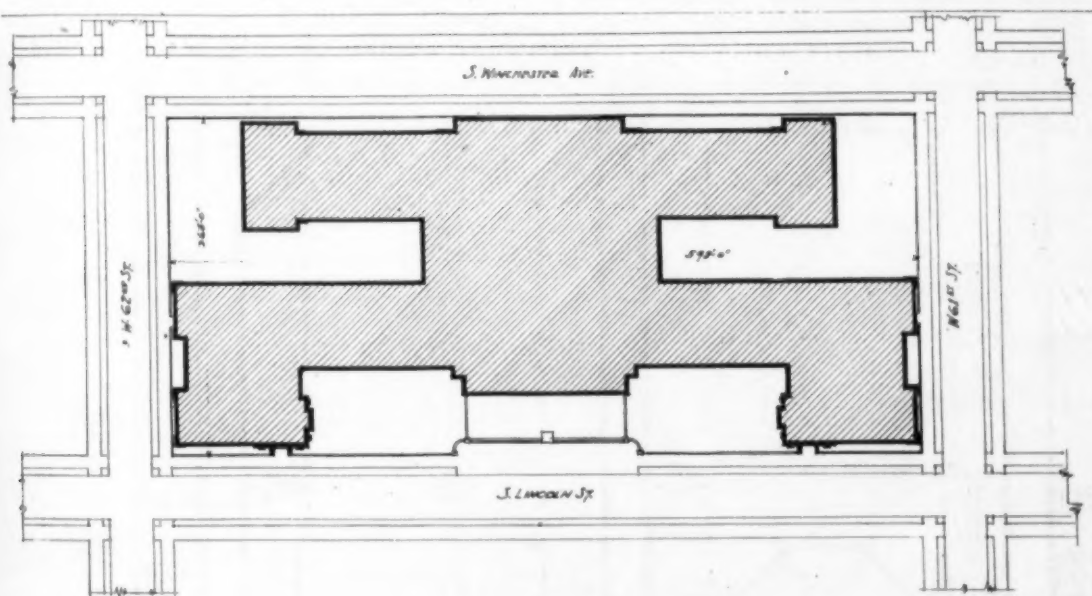
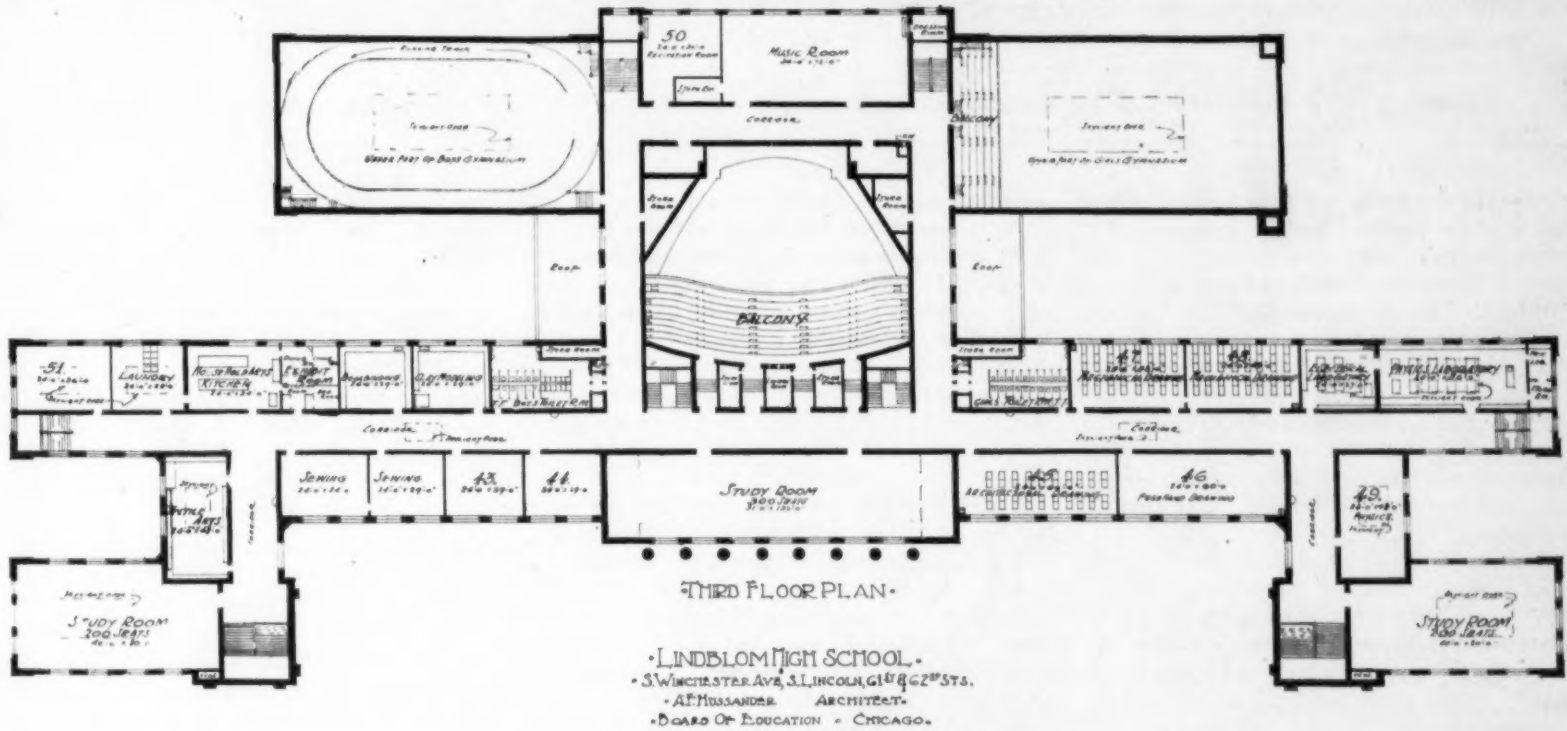
The building has no interior courts. The space between the two wings is so wide that the light is entirely adequate. In fact, one superintendent of schools who visited the building and who made an especial effort to study the lighting, admitted that several hours of inspection failed to find a single dark corner in the entire building.

The central architectural feature of the building has been made possible by placing the lunch room with its kitchen in the fourth story surrounding the upper part of the auditorium. The

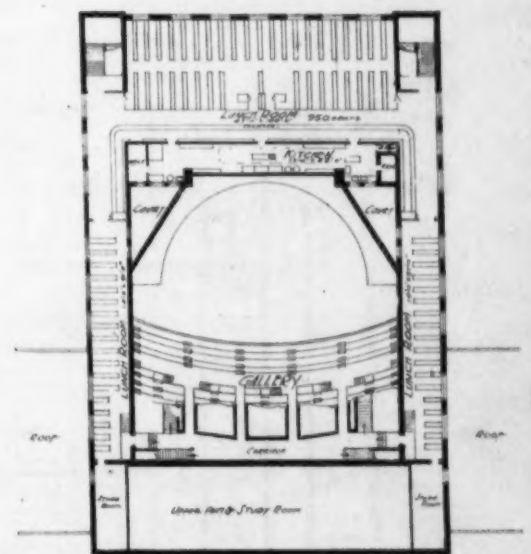




REAR VIEW ROBERT T. LINDBLOM HIGH SCHOOL, CHICAGO, ILL.



PLANS LINDBLOM HIGH SCHOOL, CHICAGO, ILL.



arrangement is ideal in that it places the lunch room where it is less obvious and where the cookery smells will not be noticeable in the balance of the building. Since the completion of the building the board of education has taken up the proposition of purchasing the adjoining block of property so as to provide an adequate athletic field for the school.

#### A New High School at Wilson and Kimball Avenues.

Superintendent P. A. Mortenson, during the construction of the Robert Lindblom High School, recommended the duplication of the

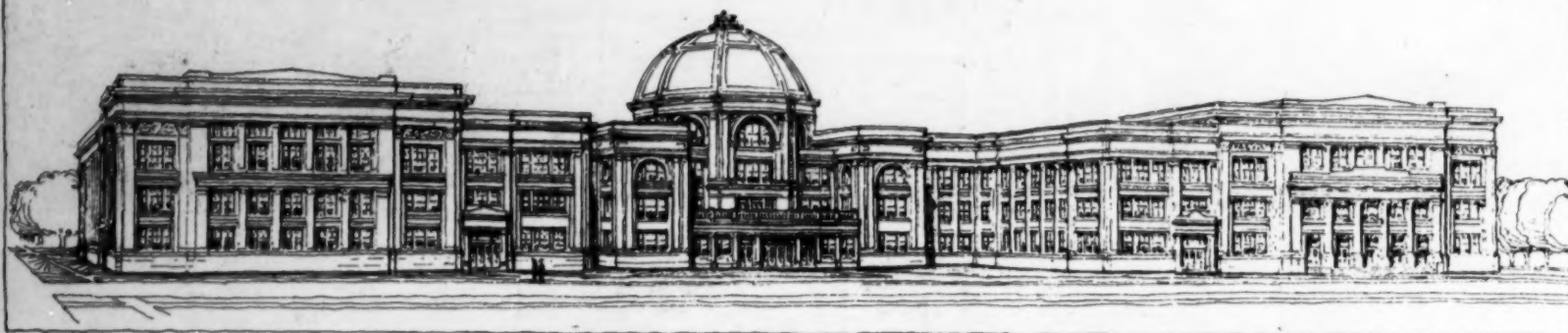
building on a ten acre site owned by the board of education at Wilson and Kimball Avenues. Before, however, the work could be started, it was found that it would be advisable to greatly enlarge the plan and to make many modifications for meeting the particular educational needs of the high school district. It was, therefore, considered desirable to entirely discard the Lindblom plans and to solve the problem on its original merits. The site for the new high school at Wilson and Kimball Avenues is approximately 600 feet square, more than twice the size of the Lindblom school.

After ascertaining the number of classrooms, laboratories and other rooms and accessories that the educational authorities considered essential, building sketches were prepared to show the relative merits of locating the assembly hall, gymnasium, etc., according to six distinct types of plans.

First—The assembly hall and gymnasium to be located in the center of the building, similarly to the Robert Lindblom Technical High School.

Second—The assembly hall to be placed on one corner and the gymnasium on the other corner.





• PROPOSED NEW HIGH SCHOOL AT WILSON AND KIMBALL AVES. CHICAGO • • • A. F. HUSSANDER ARCHITECT CHICAGO •

Third—The assembly hall to be located at one extremity of the building and the gymnasium at the other, but not on the corners.

Fourth—The assembly hall and gymnasium to be put in the center of the building but not enclosed by classrooms.

Fifth—Both assembly hall and gymnasium to be set at the same end of the building.

Sixth—A block plan was made with a large interior court so that the building would follow the street lines on the four sides and the assembly hall and gymnasium were to be located at one end.

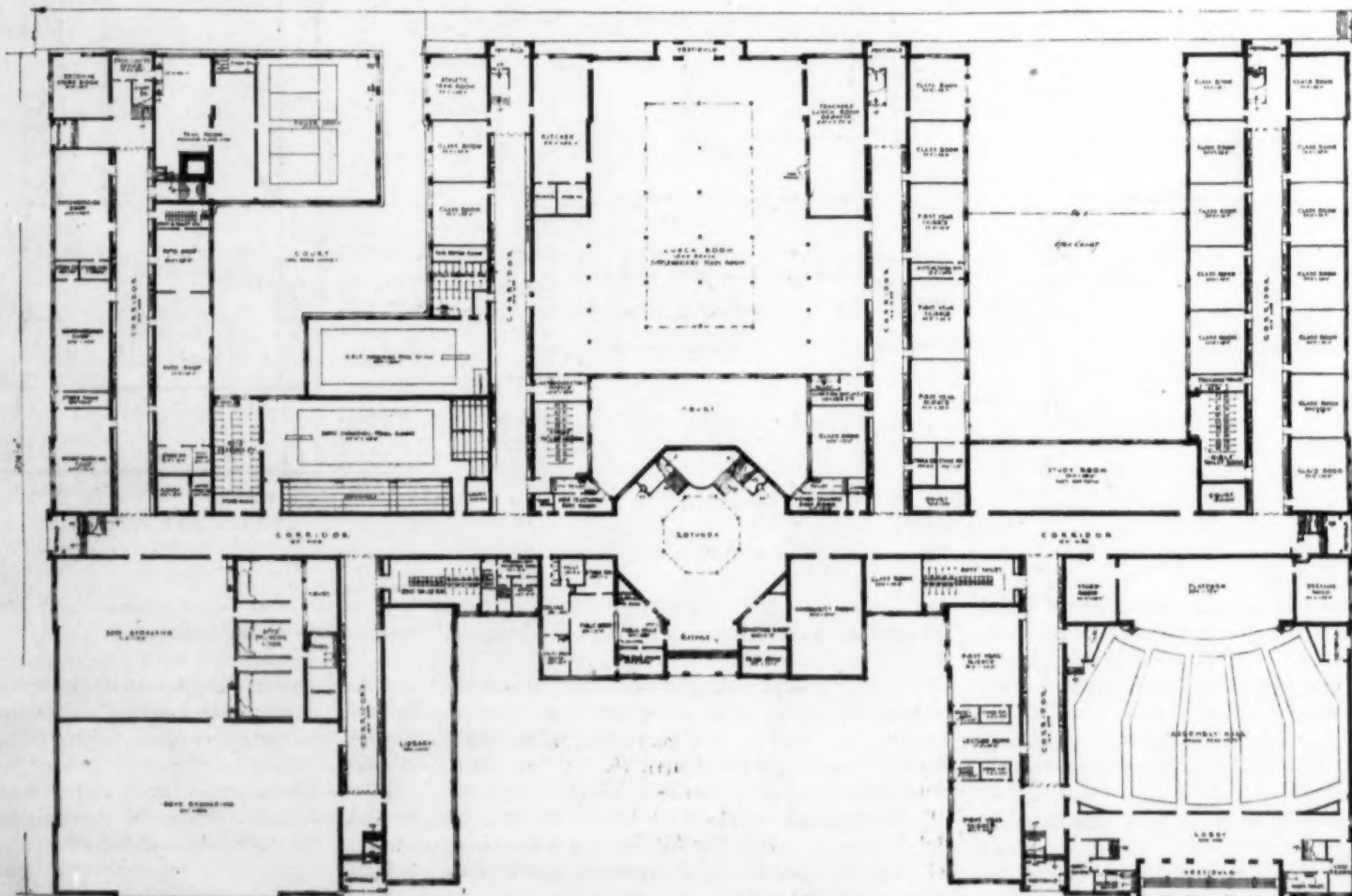
After thoro discussions of each of the plans with the superintendent of schools and his assistants, it was decided that the plan shown in the sketches should be followed. It was believed that this type of plan would afford the maximum utility from both the purely school and community-center standpoints, that it would make possible the best administrative control and would afford decided advantages in lighting,

ventilation, etc. The building faces north and is so arranged that the rooms which require the least amount of sun have a north exposure. The assembly hall is on one corner where it is accessible from two streets and the gymnasium is on the other corresponding corner with similar facilities. The classroom wings extend from the main corridor to the south so that each room has east or west light. The courts between the wings are 95 feet wide so that adequate light is assured.

A glance at the plans will show that the building has a central longitudinal corridor leading to a large octagonal lobby two stories high and directly opposite the central entrance. The supplementary corridors lead from the central corridor into each of the wings and to the auditorium and gymnasium wings. This arrangement allows the grouping of different activities in the different wings and permits of an arrangement of stairs and exits that is direct and eminently safe. The arrangement also will make

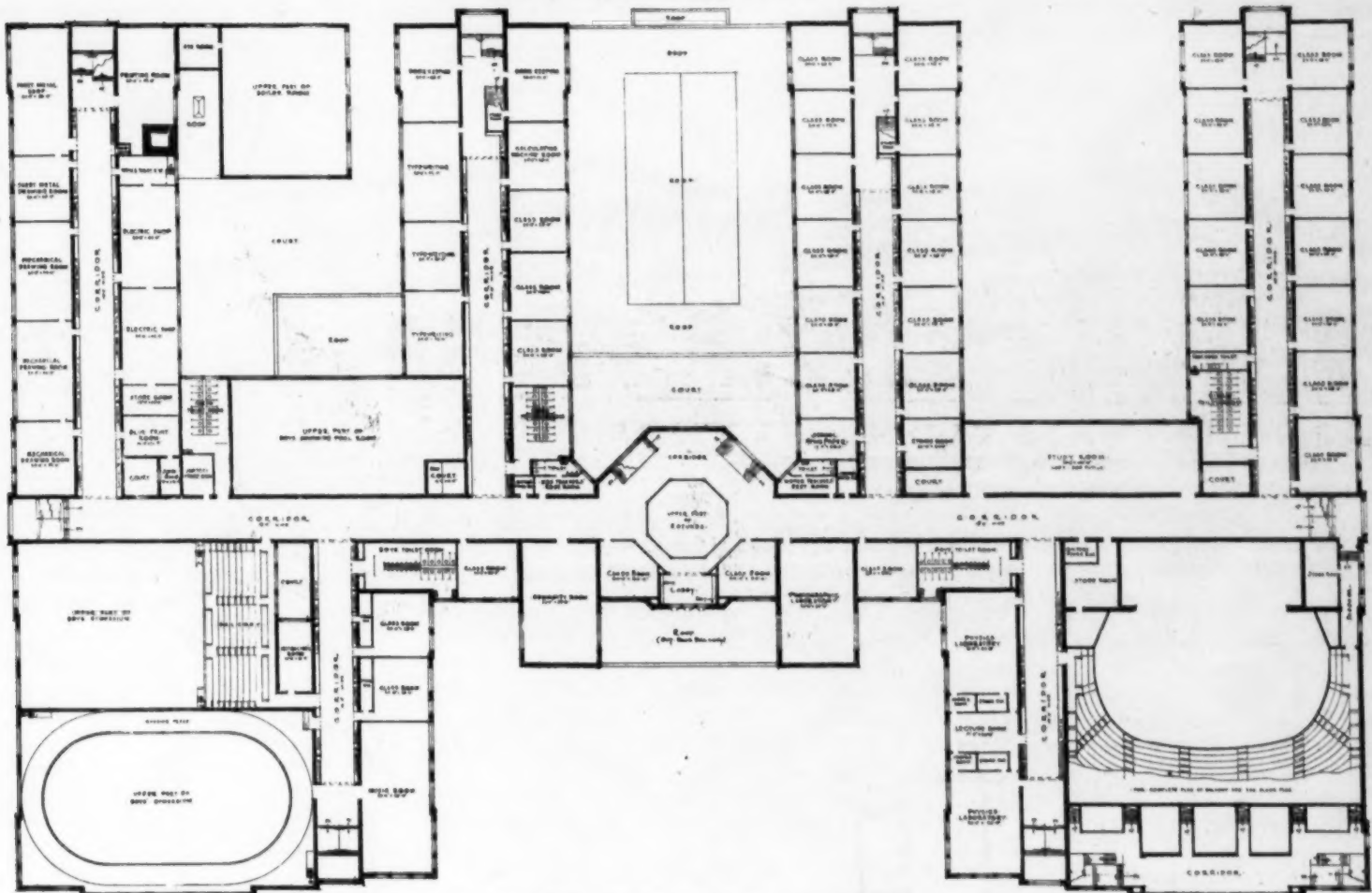
possible additions to the building in a most simple fashion. Any of the wings may be extended further south so that the building may, if desired, occupy the entire block. Many interesting features have been worked out in connection with the plan. For instance, the Ravenswood elevated station is immediately across the street to the east of the school site and is the cause of some noise. To obviate any interference of school work, the gymnasium and the shops are placed on the east side of the building. On the other hand, the location of the shops on this side will prevent their having any effect upon the adjoining residence property on the other sides of the building.

The assembly hall is in reality a complete theater seating 2,000 persons. It is located at the intersection of two streets and is readily accessible from outdoors. It is planned to so arrange and equip it that it may be used independently of the school.

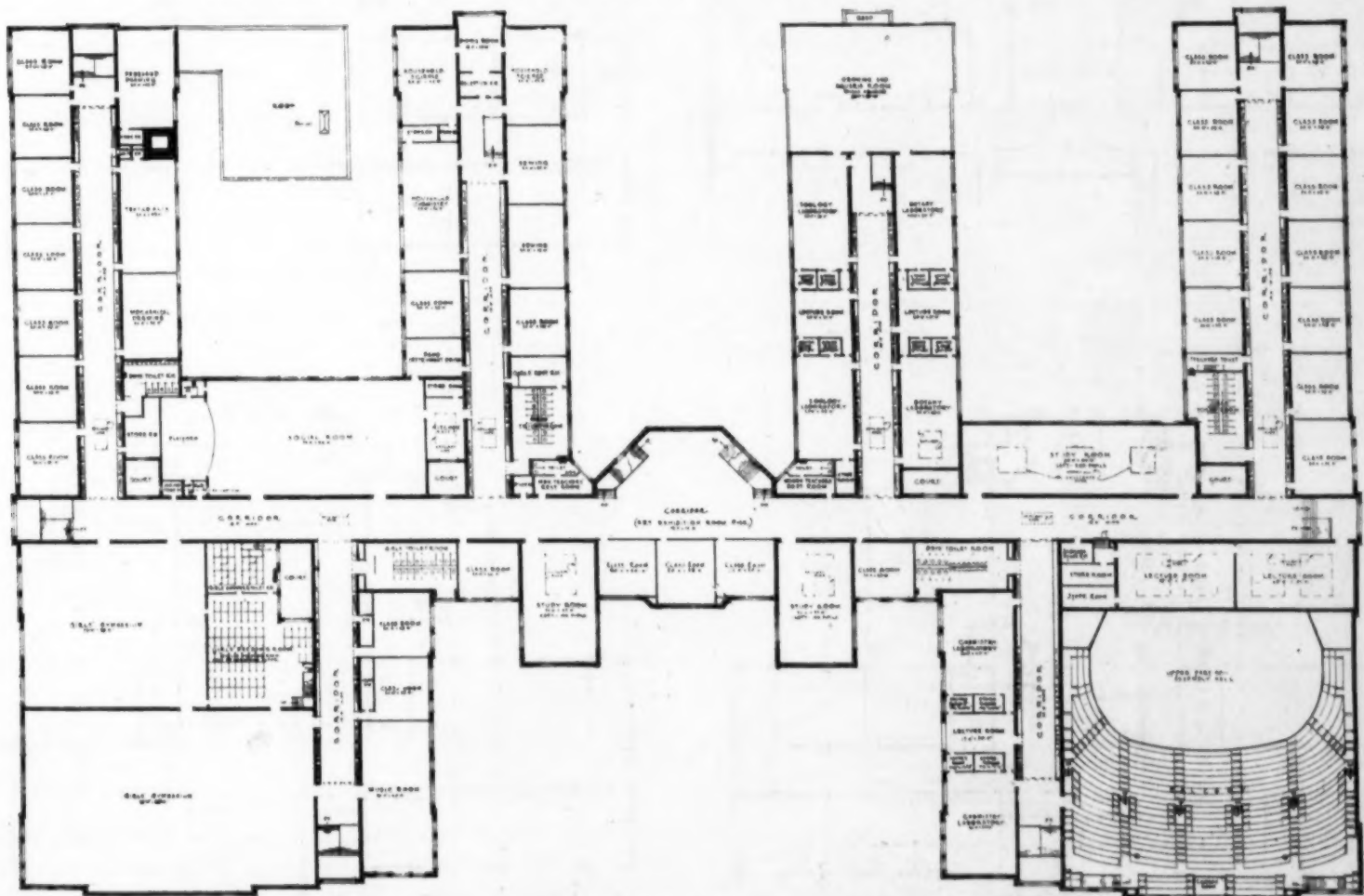


FIRST FLOOR PLAN, NEW HIGH SCHOOL, WILSON AND KIMBALL AVENUES, CHICAGO, ILL. A. F. HUSSANDER, Architect.





SECOND FLOOR PLAN, HIGH SCHOOL, WILSON AND KIMBALL AVENUES, CHICAGO, ILL. A. F. Hussander, Architect.



THIRD FLOOR PLAN, HIGH SCHOOL, WILSON AND KIMBALL AVENUES, CHICAGO, ILL. A. F. Hussander, Architect.

The lunch room is centrally located on the ground floor with access from the two corridors and an outside entrance from the athletic field. It is large enough to accommodate 1,500 children at one sitting. The section of the room intended for the teachers is enclosed in a partition.

The building is to be very complete in the arrangement for physical training. There are four gymnasiums and two swimming pools. One of

the boys' gymnasiums has a raised balcony with dressing rooms underneath. It is intended that this room shall be used for indoor meets, exhibition games and similar purposes. One of the swimming pools is similarly equipped for spectators' seats for swimming contests.

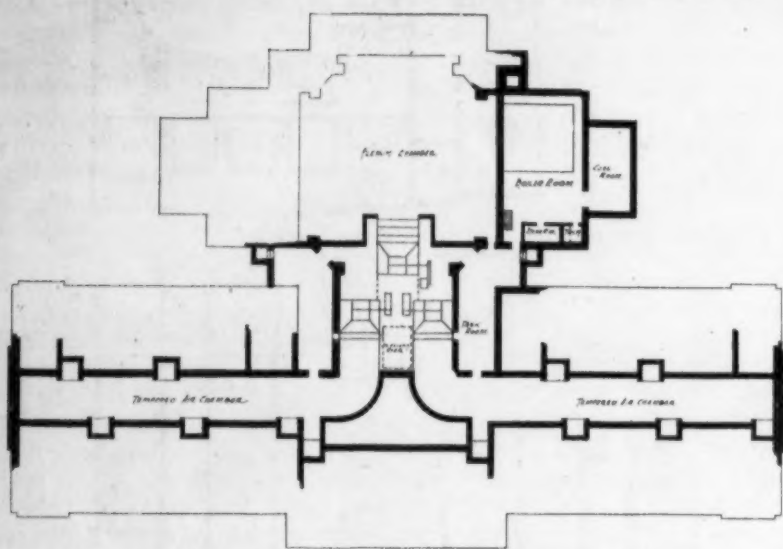
A glance at the plan will show how the laboratories, the commercial department, the academic rooms, the household arts department, etc., have

been grouped. One of the most interesting departments of the building is to be in the third story of one of the wings where the botany and zoology laboratories will be located. Here there will be a large room for growing plants and for an aquarium. The room is to have glass sides and roof with exposure to the southeast and west and is to be immediately accessible from the laboratories.





REZIN ORR SCHOOL, CHICAGO, ILL. A. F. Hussander, Architect.

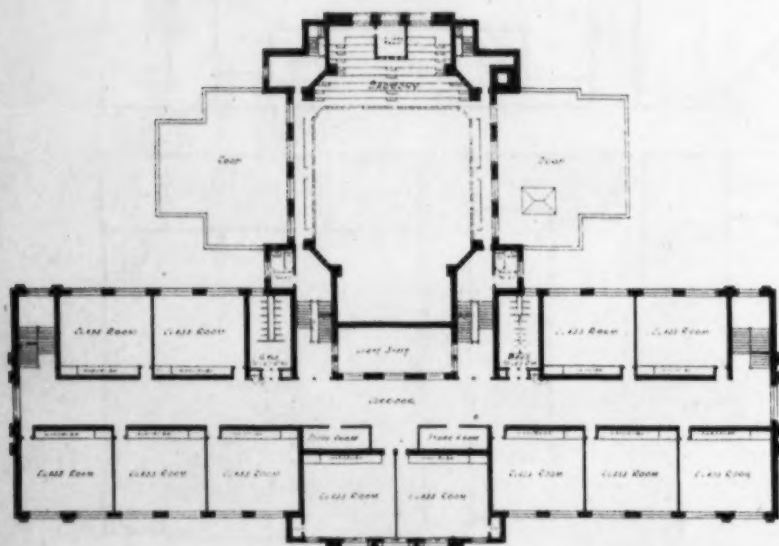


PLAN OF HEATING ARRANGEMENT BELOW FIRST FLOOR.

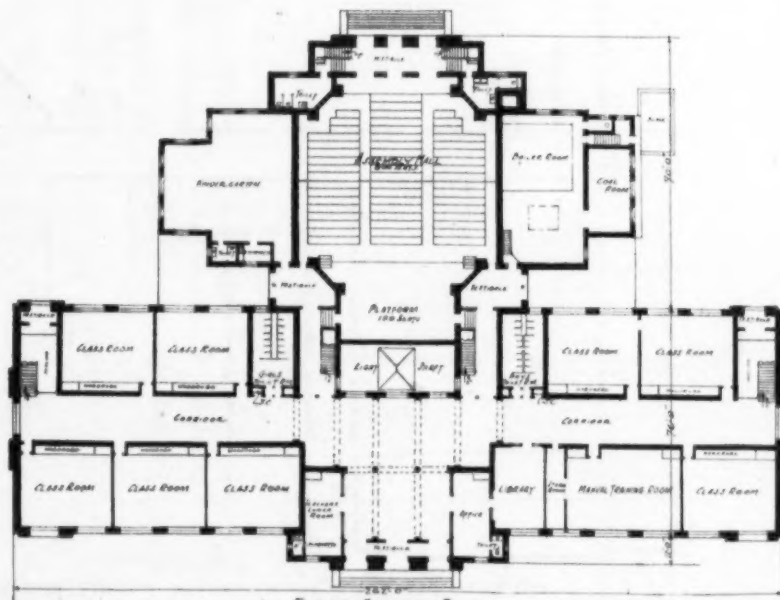
REZIN ORR PUBLIC SCHOOL.  
Cor. N. Keeler Ave. & Thomas Sts.  
A. F. Hussander, Architect. Board of Education, Chicago.  
Scale 1/8" = 1'-0"



THIRD FLOOR PLAN



SECOND FLOOR PLAN



FIRST FLOOR PLAN

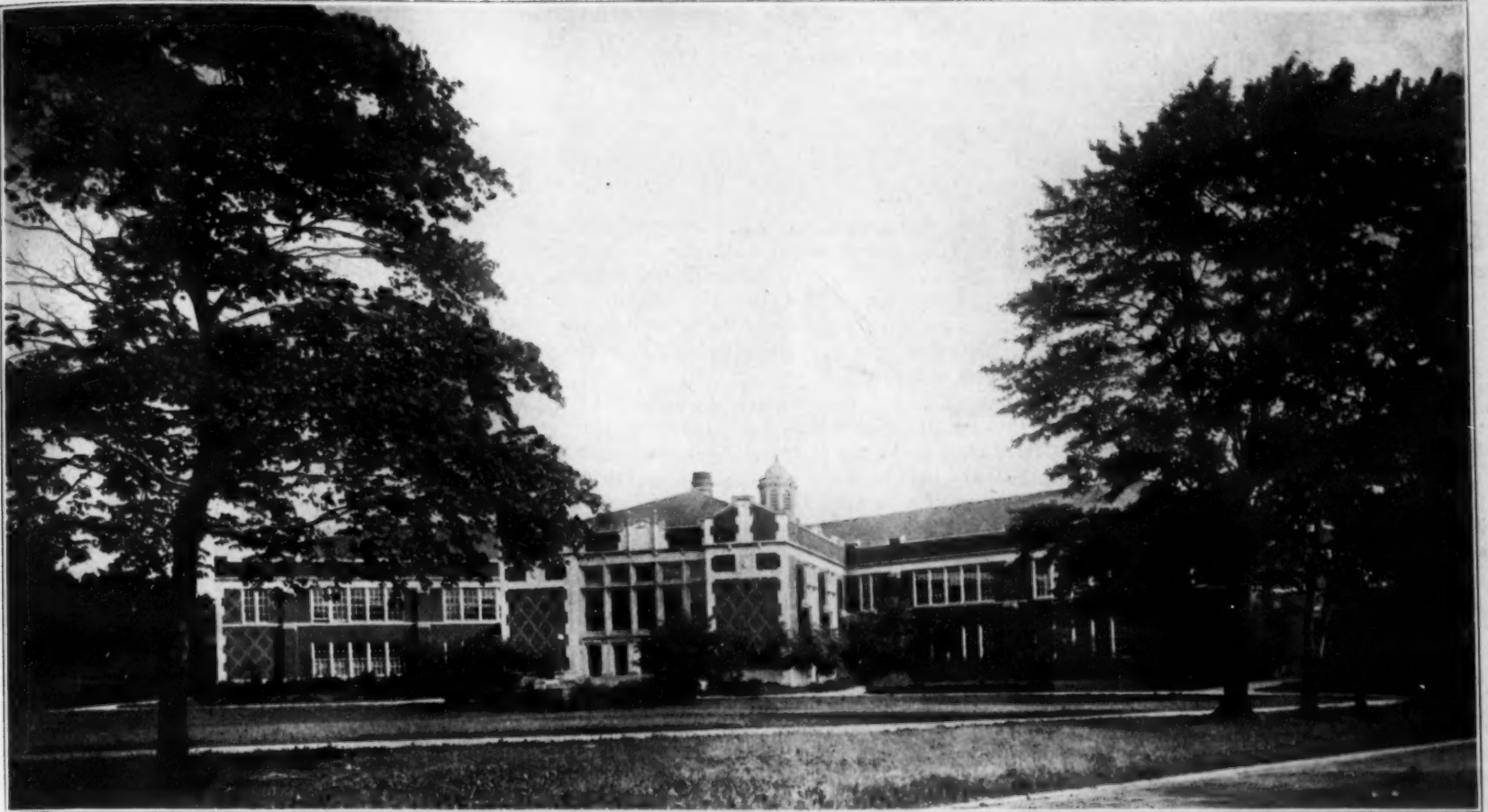
The building is to be used for the present for a high school and for the north side branch of the normal school. The latter school is to be housed in the building pending the erection of a separate structure. No attempt has been made to estimate the cost of the building but the plans will be shortly completed and offered for estimates.

#### Elementary Schools.

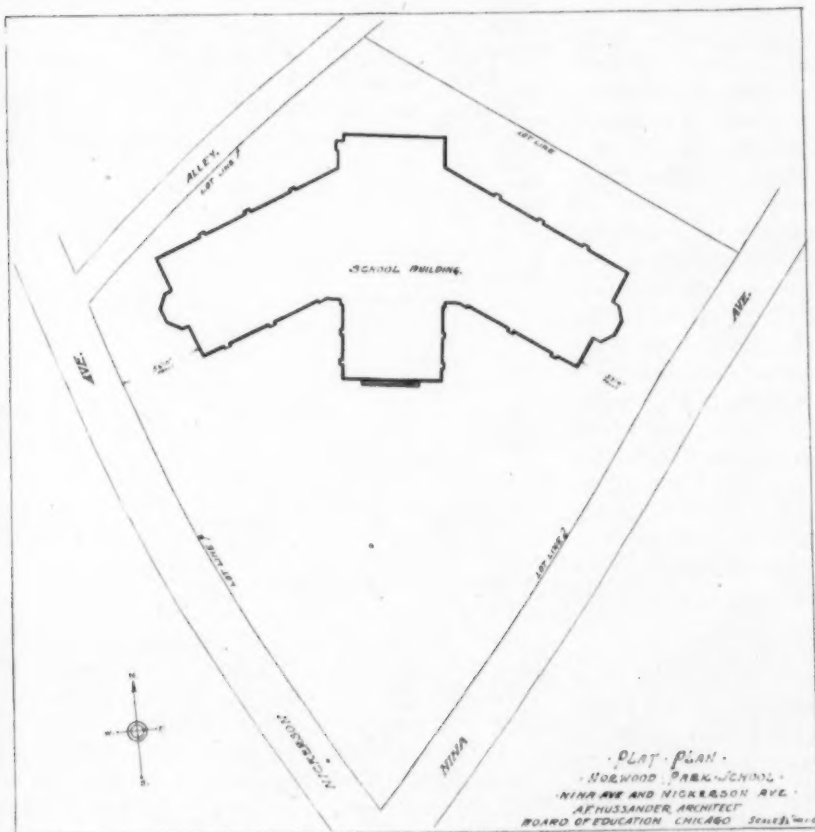
The Rezin Orr School illustrates the latest type of school building which has been developed in Chicago for the use of the grades. The building is located at Keeler Avenue, Thomas and Augusta Streets. The building is three stories high, entirely fireproof in construction and contains thirty-two classrooms, a gymnasium, a manual training room, a kindergarten,

a household science room, offices and assembly hall.

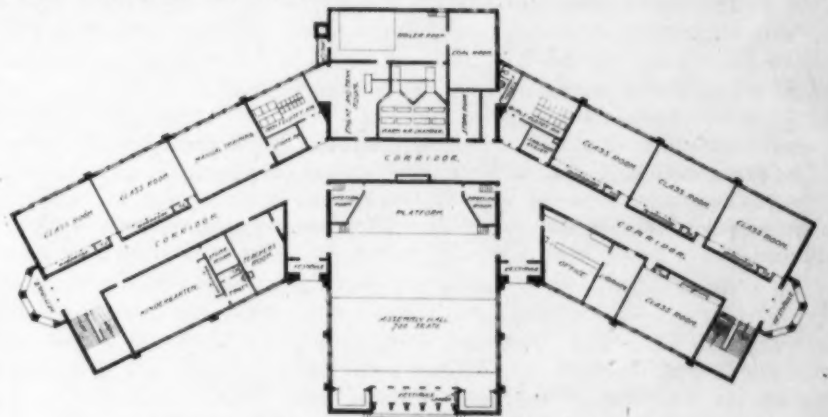
In planning the building ease of administration, ample light and outside use for social center purposes have been considered. The building is held to be one of the best types of large elementary schools from the standpoint of the educational department of the schools.



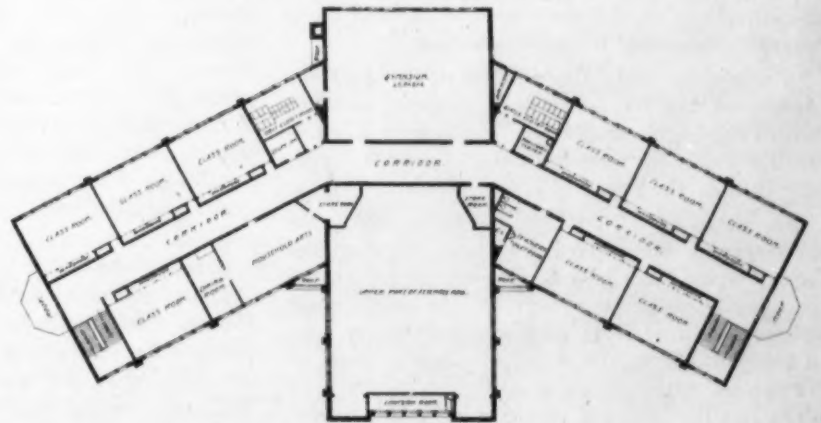
NORWOOD PARK SCHOOL, CHICAGO, ILL. A. F. Hussander, Architect.



PLOT PLAN, NORWOOD PARK SCHOOL, CHICAGO.



FIRST FLOOR PLAN, NORWOOD PARK SCHOOL.



SECOND FLOOR PLAN, NORWOOD PARK SCHOOL.

The kindergarten room is perhaps the most interesting part of the building. It is located on the ground floor to the south of the assembly hall and is a homelike, cheerful, inviting room. It is of unusual size and is so located and arranged that the little ones who use it are independent of the balance of the school. This feature makes it possible to use the room for community activities with a minimum of inconvenience to the balance of the school. A small kitchenette has been provided so that light lunches may be prepared by clubs and other gatherings.

A glance at the plans will show that the classroom section of the building is straightforward

and simple. The central lobby is of unusual size and care has been taken to locate the offices and the other special rooms for the greatest convenience in administration. The stairways and the entrances are not at the end of the long corridors but have been placed to the rear to prevent drafts in the main corridors as well as to minimize noise. The stairs are placed so that no child can leave the building without coming into complete view of a teacher who is controlling the corridor at a station opposite the main entrance.

The ventilating system of the building is of the blast-fan type arranged with three fans—one for the assembly hall and gymnasium, one

for the north section of the main building and one for the south section of the main building. The blowers are located below the level of the first floor and are directly connected with tunnels under the first story corridors. These tunnels are seven feet high and are the full width of the corridors forming long chambers for the tempered air. The heat ducts at the foot of each stack lead to the classrooms above and are fitted with additional steam coils and tempering dampers. The arrangement is such that all horizontal runs of heat ducts are eliminated and all radiation is in vertical pipes. The bottom of the

(Continued on Page 96)





## THE AMERICAN School Board Journal

WM. GEO. BRUCE {  
WM. C. BRUCE { Editors

### EDITORIAL

#### WHERE SHALL THE BEGINNER BEGIN?

In the selection of a school superintendent the first condition exacted is that the candidate shall have had experience in school superintendency work. While character, scholarship and training as a schoolmaster, are deemed basic requisites to eligibility, the question of adequate experience looms up as a leading consideration.

In brief, the office of school superintendent demands a trained school superintendent. But, the training of the school superintendent must have its beginning somewhere. The large cities may draw upon the medium sized cities, and these in turn upon the smaller cities for superintendency service. Nevertheless, somewhere the inexperienced man must have a chance to begin in gaining experience. Where shall it be?

If every school board were to exact experience as an imperative condition, the supply of experienced men would soon become exhausted. The practice has been to let the smaller unit try out the recruit and pass him on if found wanting, or permit the incumbent to flit of his own accord to the larger field.

In a discussion on the introduction of inexperienced teachers the Tribune of Tampa, Fla., recently said: "The Tribune is becoming 'fatigued' with certain unthinking men and women in and out of the press circles, who pretend to believe it is possible to maintain a faculty of experienced teachers for the combined schools of the state or country, and never permit a beginner in the schoolroom."

Proceeding from the admission of the inexperienced teacher into the classroom we must admit the beginner to every position in a school system from the lowest to the highest—including that of the superintendent himself.

In choosing a man for the latter office the ever-argued and vexed question whether the school board shall look to the outside for an experienced superintendent, or promote some school principal from within, comes under consideration. True, the larger city has in point of numerical pupil-strength a larger interest at stake but the interests of the pupil constituency of the smaller unit is as vital as that of the larger.

The adjustment, after all, must be found in the apparent relative merits of the tried and trained on the one hand, and the promising beginner on the other. No one can here lay down definite lines of action. The conditions, as they present themselves to those empowered to make the choice, must be weighed and measured, and must determine between the unpromising expert and the promising novice.

#### THE PERMANENT TENURE QUESTION.

No question connected with the employment of superintendents, principals and teachers has been subjected to more discussion, and followed

by a greater diversity of opinion, than that relating to tenure of service.

The assumption is that every one employed by the school board is certain of his or her position as long as efficient and satisfactory service is rendered. The causes for dismissal are usually enunciated. It follows, however, that the average tenure of the superintendent is less than three years, and that principals and teachers, fairly or unfairly, are dropped occasionally.

The school board holds to periodical reappointment, the teaching profession suggests permanent tenure of office. The one holds that the probation principle stimulates service, the other that security in position makes for greater loyalty and efficiency.

The fact that the average superintendent remains in office only for a period of three years may mean one of two things: Incompetency on the part of the superintendent, or incompetency on the part of the school board. Occasional changes may, however, be deemed in the school system without reflecting upon the competency of either the school board or the superintendent. Nor, are all the changes chargeable to the action of school boards. Superintendents may, and frequently do seek new environments for the sake of the benefits derived from a change.

The educational leaders who raise the issue hold that the tenure of the teacher also is not now reasonably permanent, and that "there is no validity in the contention that permanence of tenure will deprive a teacher of incentive and ambition." Right here is where the divergence of opinion begins. The opposite view is just as firmly adhered to.

It is contended that the average teacher in the United States enjoys a reasonable tenure, and that the evidence of injustice in annual elections has not been manifested sufficient to warrant the legal establishment of permanent tenure. The transient character of the teaching profession, with its frequent voluntary entrances and exits, is more largely responsible for adherence to the probationary principle than any other cause which could be named.

Dismissal without cause must always be condemned, but it is doubtful whether the average board of education is ready to accept the permanent tenure principle before the tendency to enter the profession of teaching as a stepping stone to other activities in life, is permanently removed. Women, as a rule, teach until they marry. The legal, medical and other professions are largely recruited from the teaching forces, while it rarely happens that a lawyer, a doctor or an engineer enters the profession of teaching. Eliminate transiency and we shall reach permanency.

#### UNEQUALIZED SCHOOL SUPPORT.

If the disturbed conditions in school administration thruout the country have brought out any one fact definitely and concretely it is the one relating to the unequal support afforded for the maintenance of the schools. The shrinking of income, or rather the increased cost of things, has brought the hitherto modestly supported school district to the poverty stage.

The contrast between the wealthy district in which the schools are well supported, and the poorer district with its meagerly supported schools, has become sharper and clearer.

Facts along this line were brought out at a national school conference held this year. It was shown that there are school districts in the United States where the taxable property yields a liberal revenue for school purposes, and districts, immediately adjacent, where the property consists of poor land and modest homes, and yields but a meager revenue.

In many states the inequalities arising out of

the variation in wealth and school population have been met in a state school tax. Here the state exacts the tax on the basis of taxable wealth and redistributes the same on the basis of school population. Thus, the districts favored with taxable wealth and a proportionately small school population contribute to the districts where the taxable property is meager and the school population is proportionately larger.

This method proceeds from the theory that the state is one educational unit and that all the children within this unit must have an equal chance, a theory which is entirely sound and in keeping with the spirit of self-governing people.

In states where this theory remains unrecognized, and where the inequalities complained of exist in any marked degree, legislative action should and must be taken. While local responsibility to keep the schools upon high standards of efficiency should not be relaxed, the state must come to the rescue of the weaker units whose maximum tax revenue will not permit them to do full justice to the schools.

#### THE JOY OF A JOB.

If the great unrest which has manifested itself in the activities of a civilized world were traced to its origin it would be found that men had slackened interest in the tasks assigned to them. The joy of doing has given way to the mere desire for material remuneration.

The world's best work has always been accomplished by those who found joy in working. Be it in art or science, in literature or education, in manufacture or trade, those who assumed their task with enthusiasm and a wholeheartedness completed their task with greater perfection than they had originally planned.

Long before their task was completed they received their full compensation in the joy they derived in the process of creating, the assembling of forces and materials and subjecting them to the will of mind and the skill of hand, and finally in the delights of the finished product. To them the financial consideration became a mere incident.

Every great invention and every laudable achievement has come to mankind thru the impelling power of the joy of service. It has turned men from the meaner to the better things of life. The mechanic at the bench must find joy in his job if he is to do full justice to himself and his employer. The businessman and the professional worker will render society a better service if the element of joy finds a place in their labors.

The joy of labor must reenter all the activities of life—the home, the school, the workshop, the office—if national calm, order and contentment are to be restored. The world's work cannot be well performed if hindered by the sneers and grunts of pessimists and joy-killers.

Certain it is that the school may make a substantial contribution in this direction. The schools should foster joy as an essential element of life. A well-tempered school board, a cheerful superintendent and a body of enthusiastic teachers may do much to spread the gospel of joy in doing, joy in service, joy in a job.

They can prepare a generation of men and women who are not only equipped to perform the world's work efficiently and well but also to make a substantial contribution to the sum of human happiness.

#### ONE SIDED SCHOOLBOOK CONTRACTS.

A good bargain is one in which the buyer and the seller have agreed to exchange something for money on a basis fixed by the law of supply and demand, and by the common equities and usage of trade methods. When a bargain is one-sided, giving one of the contracting parties an undue



advantage, it becomes a bad bargain. Such bargains are brought about either by the sharp practice of one of the contracting parties, or by a sudden turn from normal to abnormal conditions.

We have been living in a period of abnormal economic conditions. During this period no bargain made during the preceding normal period between manufacturer, wholesaler and retailer was adhered to if such adherence spelled ruination to one or the other party to the bargain. The spirit of fair-play—the law of supply and demand—found the adjustment.

The legislature of Illinois decided some time ago that the schoolbook publishers must continue to supply their product at pre-war prices because they were under contract.

The Urbana, Ill., Courier, in discussing the subject, says: "The publishers had to violate a sacred agreement, or go into bankruptcy. \* \* \* There are some people who will starve to death for the sake of principle, or out of regard for honor, but generally speaking they are not as numerous as those who are less circumspect, but more practical minded.

"When the workman, be he ditch digger, or a maker of books, gets less for his effort than will enable him to continue with profit to himself, he will either quit or get more money, and all the man-made laws in christendom will not stop him.

"If we want coal we will have to pay the miner, the operator, the railroad, the dealer and the hauler, a sufficient sum to satisfy each and all or we go without coal. It is the same way with books, with wheat, and with every other commodity that we need and some one else has. If we want it bad enough we will have to pay his price. The only other way is to do without. Even tho we starve him into submission we are not gainers for long. The book concern must make a profit to stay in business, and the coal digger must be able to live in order to continue to dig coal.

"Price fixing, on the part of the buyer, no matter under what guise attempted, always has and always will be a failure. The only time it works is when the same result would be accomplished by natural laws. Whenever the price fixer goes against natural conditions, he makes himself ridiculous, and finds his efforts futile.

"We can fix the price of school books and they will stay fixed until that price becomes a gross inequity. We can fix a man's wages and he will work for them just as long as they are reasonably sufficient—and no longer. A million strike laws, and ten million state constabulary, cannot alter this fact.

"On the other hand, when a man is no longer worthy of his hire, we will quit giving him a job. When school books cost more than they are worth, we will cease buying school books."

#### THE SCHOOLHOUSE FIRE SEASON.

The country suffers an average of five schoolhouse fires a day. So reports the National Board of Fire Underwriters. In 1918 the sum of \$2,026,840 was lost in schoolhouse fires due to unknown causes. During the same year there were also schoolhouse fires aggregating a total loss of \$1,673,156 due to strictly preventable causes. There were 1,778 separate fires.

The season of schoolhouse fires is approaching. As soon as cold weather sets in the destruction of schoolhouses by fire will begin. This has been the experience for many years, and will continue to be until radical reforms in schoolhouse construction and maintenance have been effected.

In reviewing the situation the first concern of school authorities should be the protection of human life. There are no statistics to tell us

what the loss of human life, as the result of schoolhouse fires has been. Suffice it to say here that the loss of a single life would be one too many. We know that the Collinwood, Ohio, schoolhouse fire alone killed 173 children.

Therefore, the subject of guarding the lives of pupils and teachers deserves attention. Fire drills, fire escapes, fire alarm boxes should command the attention of school boards. Defective heating apparatus, defective chimneys and flues, inflammable material, and careless persons—all should be looked after.

The era of fireproof buildings is here. New structures have minimized the danger of destruction by fire. Fireproof materials are employed, heating apparatus has been made more durable, electric wiring is installed in accordance with safety rules, assembly halls are placed on the ground floor and exits are made more ample. The real danger, however, lurks in old school buildings, old apparatus and installations, and finally always in careless persons.

It behooves the cautious, circumspect and practical school board to provide at the very beginning of the winter season against the dangers of fires. The time to prevent calamity is before calamity has come.

#### WHO BOSSES THE SCHOOL JANITOR?

Under this caption the August number of the JOURNAL discusses a case that came into prominence in Philadelphia and in which an incompetent janitor entrenched himself behind the wall of "political influence" and defied the authorities to remove him. The editorial assumed that the janitor must come under the immediate direction of the school principal and that political influence is too frequently employed in the selection and retention of school janitors.

Commissioner of School Buildings, R. M. Milligan of St. Louis, in an interesting communication, which appears in another column of this issue, objects to the tenor of the editorial. He proceeds upon the thought that the janitor-engineer is far more competent than the principal to determine upon questions relating to scientifically constructed heating, ventilating and humidifying plants. And here Mr. Milligan is correct.

Where the janitor-engineer service has grown sufficiently important, as is the case in every large city, and comes under the control of distinct expert supervision the principal must naturally be eliminated from authority. Where the janitor, however, is not under such control and at the same time a man of meager capacity he must, in the very nature of his duties be brought under some immediate authority.

We cannot agree with Mr. Milligan that a frank discussion of the subject will do any harm. In fact, his own able treatment of the same proves that light must be shed upon the relations involved, in order that schoolhouse management may be kept upon an efficient and satisfactory basis.

#### TEACHER SHORTAGE NOT SERIOUS.

With the fall opening of the schools the status of the teacher shortage is revealing itself with greater clearness. So far as the mid-west country is concerned the condition is not so serious as it was anticipated during the summer months. In fact, it is safe to say that almost a full quota of teachers has been supplied.

The shortage at this time, as far as can be ascertained, is confined to the more remote and sparsely settled districts of Wisconsin and Minnesota. Here teacher shortages have been experienced even during normal times.

Seven states in the middle west report that they are practically supplied with all the teachers needed, as follows: Indiana has its quota

of teachers with a surplus of 300 for substitute work. Kansas has an adequate supply of teachers in all classes of schools. Ohio reports no teacher shortage. Illinois has opened all her rural schools fully equipped with teachers. There is a comfortable supply of teachers for all grades of work. Missouri reports but few vacancies. The supply of teachers is ample. Wisconsin experiences a shortage in some northern rural districts; all other schools are well supplied with competent teachers. Minnesota has no teacher shortage except in some of the northern districts.

While the complete reports from all sections of the country are not at hand it is safe to say that the cities have a full staff of well-trained teachers. The shortages are apparently confined to the remoter sections of the rural districts.

In reviewing the situation it must be conceded that school authorities have here and there most sensibly relaxed some of the rules relating to the employment of teachers. Salaries, of course, have everywhere been made more attractive, but admissions to the teaching profession have been less stringent and have been guided by the situation.

At any rate, the American school authorities have met the situation in a practical man-fashion. There is no longer a school crisis.

#### "GO AHEAD WITH THE SCHOOLS!"

School administration implies the constant solution and adjustment of problems and difficulties for the successful conduct of the schools. These must run smoothly and efficiently. The school plant must yield an acceptable product in keeping with the time, energy and money expended upon it.

Some one has aptly said that school boards do not run the schools but merely see to it that they are run. This "merely seeing to the running of things" has become the big task of the hour. The superintendent, no doubt, has his responsibilities and his burdens at all times, but the school board member who is called upon to find an adjustment between high prices and low taxes, between a swelled budget and a meagre treasury, between a growing school population and an ultra-conservative tax-paying constituency, has at this time a real man's job before him.

We note here and there the evidences of timidity; of excessive circumspection, of extreme caution. Here a new schoolhouse project is deferred, there the teachers' salaries are held below a just scale; here curtailments are made, there the taxpayer must not be offended. Doubt and hesitation has had a paralyzing effect on school administrative endeavor.

But, modern civilization must be served. The command of the hour must be "Go ahead with the Schools!" The rising generation must be trained for citizenship, the nation's stability and perpetuity must be assured. The schools must be kept whether the prices are high or low, whether teachers scarce or plentiful, whether schoolhousing is short or ample—the march of civilization and progress must go on steadily, persistently, courageously. Whether the nation passes thru periods of prosperity or depression, economic disturbances or economic calm, the slogan, ringing loud and true, must be "GO AHEAD WITH THE SCHOOLS!"

A woman member of the school board of West Fork township, Iowa, pummeled a fellow male member with a stove poker in order to carry her choice of a teacher. And now the whole board has been placed under bond to keep the peace. The court lacks a sense of humor. The board merely gave a practical demonstration of its faith in corporal punishment.



# School Report Score Card

William H. Allen, Director, Institute for Public Service

Now and then school managers must smile at the plethora of scores and tests and standard scales for sub-normals, for third graders in silent reading, for achievement in geography, arithmetic, composition, history and almost everything else under the sun except capacity or achievement in managing.

All over the country this last summer principals, supervisors, county normal school directors and superintendents were learning how to give and read standard measurements. Just think of the joy over probable future prestige that comes from spending real time, real money and real opportunity in learning how to give mental tests that include these: "Can you frustrate calico?" or "Does an albatross matriculate in the autumn?" or more thrilling still, "If ontogeny invariably ingeminates phlogeny, circumscribe the word giving the location of the *ourcq*; if not, underscore the word that locates the *mandible*. England Foot Utah Face Peru France Arm India."

In the meantime, schools are losing able teachers, are discouraging able recruits, are enduring congestion and disheartenment for want of the public understanding which alone will secure the public support necessary to properly paid teachers, properly equipped schools and properly progressive programs.

To help school managers sow and reap public understanding while still keeping within the sacred precincts of "standard testing" the Institute for Public Service suggests the accompanying simple score card for annual reports. It is called simple because there are only sixteen points instead of 100 and because no language is used that is not readily understandable by either school superintendents or other clients.

Furthermore, effort is made to list first only minimum essentials, the "greatest common divisor" for small town and large town accounts of stewardship. In fact, principals of high schools or elementary schools might well try to tell their story within these limits. Those who are not in the habit of making annual reports may easily use this score for their method of explaining to their customers and financial backers what they have done. For convenience and in deference to the scale features the sixteen points are allotted a positive score of 100. Going beyond the minimum essentials to many excellencies a total positive score can go on up until literally it hits the sky. After 100 is reached in minimum essentials there will be competition over the top which will give credit.

A still further important refinement of reporting will come after schoolmen have competed for a net score of 100 minimum essentials, namely, deductions will be made for defects. For example, a report might earn 10 points for listing advance steps taken in the year or two years reported upon and still require a deduction of one, or three, or seven, for an offensively egotistical or braggadocio method of summarizing. Again, a report might earn ten for teacher recruiting among ablest pupils and also need a deduction of three or perhaps ten points for driving teachers out of a system by unreasonable supervision.

But the lidless and topless scores and net scores in which defects have been subtracted from excellencies are the step after the next. The first move is for reporters to attempt to cover minimum essentials. If the superintendent is in doubt he will find much help from his teachers or principals, or perhaps a board member who will help score his own report.

School Report Score Card.			
	Minimum Essentials	Possible Score	Earned Score
1.	Address to parents and supporters .....	10	
2.	Issued in time to help next year's work .....	3	
3.	Issued in installments.....	2	
4.	Easily usable in local newspapers .....	5	
5.	Advance steps taken in period reported .....	10	
6.	Needs-not-yet-met listed .....	10	
7.	taxpayers' part specified....	5	
8.	school agents' part specified.	3	
9.	patrons' part specified.....	2	
10.	Next steps specifically recommended .....	10	
11.	Teacher recruiting among ablest pupils .....	10	
12.	Self-survey, results explained.	10	
13.	Statistics, meanings explained	5	
14.	Photographs and graphs.....	3	
15.	Index or contents-index.....	2	
16.	Teacher suggestion and initiative used .....	10	
Total positive score.....		100	

In the distribution of 100 points among sixteen minimum essentials we have, of course, merely expressed tentative judgment of relative values. We have given 70 of 100 points to seven items: (1) addressing the report to parents and supporters instead of to colleagues and university professors who recommend for positions; (2) listing advance steps taken, (3) needs not yet met, and (4) next steps specifically recommended; (5) teacher recruiting among ablest pupils which certainly ought to be done so that it can creditably be reported by every educator who has an audience; (6) explaining results of self-surveys, which, of course, means that the self-surveys have been made; and (7)

citing use made of suggestions and initiative on the part of teachers, another obvious minimum essential of proper educational leadership in our time. Perhaps these items ought to have been marked nine or seven instead of ten. That is a detail. Certainly they call for universal recognition as major minimum essentials.

Some of the other items may seem too small for mention among minimum essentials, such, for example, as two points for issuing reports in installments, for specifying the part which patrons may take in meeting needs and for an index or contents-index. Yet no schoolman will easily earn credit under these three heads without first having written a report worth indexing, thinking out a patrons' part worth specifying, and preparing installments worth special printing.

Does "easily usable in local newspapers," or explaining the meaning of statistics used, deserve a special place and five points? This again is a matter of opinion, but for every person who will read the report itself hundreds or thousands will read press extracts from it. The whole thinking process changes if a writer pictures as his audience the people who furnish the children and the money for a school system.

This simple score card is commended to school board members from whom more than a pro-functory interest in school reporting is needed. They can tell whether the superintendent's report is out in time to help next year's work and whether it clearly distinguishes and clearly lists advance steps taken, needs not yet met, the part that trustees may take and the part that taxpayers and patrons may take, and whether its statistics are clear or confusing. If one thousand school boards should apply some such definite test to the report for last year's work or next year's need, they would do more for American education than could fifty million dollars contributed by the federal government.

## ORGANIZATION AND CONTROL OF PARENT-TEACHER CLUBS

J. Monette Diley, Supt. of Schools, Grand Rapids, Ohio

We of today, live in an environment vastly different from that of a century ago. Life everywhere is more complex, more intricate, more difficult. We are undergoing a social and industrial revolution, perhaps the greatest in all history.

This revolution creates needs in adjustment. One of the greatest of these is the need of social and educational association. The community center does much to supply this need. Especially is this true of the many parent-teacher associations, for here both parties by social and educational contact can draw added strength and added understanding from each other.

No careful student of modern educational history will fail to regard these organizations as one of the excellent powers for good that a school system can have allied with it. Since this is true, a brief study of these organizations in regard to their operation and control may prove of worth.

The first problem that would face the promoters of a parent-teachers' club, or of any community club, would be that of locating a meeting center. The average community offers a number of possible places of meeting, among which might be mentioned lodge halls, town halls and the school auditorium. Of all of these the school is the ideal place of meeting. It represents no sect, no class, no group, but rather all the people, united together to promote the common welfare. The very fact that its aims and activities are directly related to

every parent, in every community gives it an interest no other plant could have.

The place of meeting decided, the initial meeting could soon follow. A considerable amount of care is needed in the successful formation of the club. Otherwise the movement may be killed before its birth. Outside influences have no place in this phase of the work. No school faculty, no board of education has enough power of appeal to launch such a project successfully. The impulse must be spontaneous desire, in the people themselves. The leader and the majority of the formative committee should be made up of the laity. This does not mean of course that the teacher-element is to be of negligible importance. They will doubtless prove essential leaders in the club work. The thought is, that they must not dominate and by so doing make it a mere school activity. The committee, or the leader can arrange for a meeting in which the work of similar organizations, elsewhere is reviewed and community needs discussed.

A good means of getting a representative crowd is to include a program or worth-while address as part of the evening's offering. Local papers are always ready to aid in the announcement work. The crowd once assembled and the question of organization needs and values fairly put, it will be an easy task to effect an organization. The usual officers are a president, vice-president, secretary and an executive committee. The best single rule for organization is, have as little "red tape" as possible.

(Concluded on Page 83)





THOUGHTS OF A SCHOOL PRINCIPAL.  
Calvin N. Kendall, Commissioner of Education,  
Trenton, N. J.

1. I realize that I am partly responsible for hundreds of thousands of school children. I must share this responsibility with parents and with teachers.

Mine is an opportunity to serve these children in the dignified office of principal of a school. It is an unusual opportunity, extending in many instances over a number of years. May no child be handicapped in his life by any negligence or inefficiency of mine.

2. I realize that pupils look to the principal with respect and confidence. He is the big man—or woman—of their immediate acquaintance. Outside the family circle, I am perhaps the most influential person in the lives of children. Who can estimate this influence?

3. I will be a leader in the community. I will not be a recluse; I will know the men and women of the neighborhood. They should look up to me and respect me for my character, my attainments and my moral leadership.

4. I will organize parent-teacher associations, which may be a fruitful source of good in a school.

5. I will know the course of study and the reasons underlying it.

6. I will be a student of education. An elementary school principal may easily become narrow and pedantic, and I am resolved that I will not so become.

7. I will inspire my teachers by being an educational leader. There is great opportunity for self-improvement on my part, owing to the long vacation which the principal ordinarily has.

8. I realize that teaching must be made attractive to men and women of high character. One way of making it attractive is by having more democracy in the schools. I will not object to differences of opinion among teachers. I will rather encourage such differences. Teachers should be encouraged to do their own thinking.

9. I will stimulate and encourage teachers to try well-considered new departures in their schools, such as the teaching and practice of thrift, community singing, the problem method of teaching, the use of scales and measurements to test results of teaching, and teaching children how to study.

I believe there is nothing more deadening to a wide-awake, ambitious teacher, than to do school work in the same way, year after year.

10. I will cooperate with teachers, for we are partners in the same educational enterprise.

11. I will be cheerful; my stock of good nature shall be inexhaustible. I will look on the bright side of life and see to it that cheerful feeling radiates from my office. Whoever has no zeal or enthusiasm for his task is pretty sure to do it indifferently.

I will cultivate my sense of humor. I will enjoy a joke in the schoolroom. To be "long-faced" is not an asset in a school principal, but a liability. There is not humor enough in schools.

12. I will participate with the pupils in their games and other athletic exercises. This will be good exercise for me and keep me young. It will set a good example to teachers. A principal is no worse principal because he is a good baseball player.

13. I realize that one of my duties is to create such conditions that teachers can do their work as free from petty annoyances as possible. I will see, so far as I can, that necessary supplies are on hand; that teachers are not burdened with duties which belong to the janitor; that their environment is as happy as it is practicable to make it.

14. I will encourage teachers to be students, the old as well as the young, the experienced as well as the inexperienced. The bane of the schools is the self-satisfied principal or teacher. The children should not be the only learners in a school.

15. In visiting schools my attitude before the teachers and children shall be that of making the teacher seem supreme. I will reserve to myself the right to criticize the work of the teacher, but not, of course, in the presence of the pupils. I will also not fail to commend. I realize that I am not merely a principal, but a teacher as well—a kind of head teacher. I believe that the teacher is entitled to know my opinion of her work.

"Sound criticism," James Bryce said, "seeks rather to discover and appreciate merits than to note faults."

16. I will be charitable in my judgment, particularly of young teachers. "Charity vaunteth not itself . . . doth not behave itself unseemly and is kind."

17. I will not abandon my leadership by allowing teachers to make disparaging remarks about the school system or the board of education. I will insist upon their being loyal to the institution of which they are a part.

18. I realize that a principal must have courage. Teachers do not have—and ought not to have—respect for a man afraid of his shadow. I must have well thought out educational convictions. I know that the office has become of late more complicated and more responsible.

Evanston, Ill. The board has purchased two large houses which will be rented to the teachers at the lowest possible price. The first floors will be devoted to reception parlors and classrooms. The action became necessary because of the high rents and the low salaries of the teachers.



Philadelphia will sell \$2,000,000 worth of school bonds. Having failed to sell the bonds to bankers and brokers en bloc the board has decided to sell them to the public in small denominations.

Total savings deposits of nearly \$11,000 and withdrawals of only \$553.20 have been made during the past school year by pupils of the Central Falls, R. I., schools. When the school savings system was first introduced it met with opposition by some people, but the popularity of the plan has grown, as shown by an increase in deposits year after year. In 1901-1902 the deposits amounted to \$1,858 and the withdrawals \$760.

Sioux Falls, S. D. The per capita school levy has been fixed at 15.95 mills as against 11.04 last year.

The board of education of Chester, Pa., has approved a bond issue of \$250,000 for the acquiring of land, erection of new buildings and purchase of others.

Minneapolis, Minn. Business Supt. George F. Womrath has compiled statistics showing that approximately \$1,500,000 will be needed the next few years for eighteen grade schools and high schools, and for the enlargement of 46 existing sites. It is proposed to issue bonds covering a period of years, the bonds to be issued thru the authorization of the board of estimate and taxation or the state legislature.

Renville, Minn. The board of education is erecting four bungalow schoolhouses to take care of students until the completion of the new high school. The bungalows will be used as residences when the school board has no further need for them.

The school board of Boston, Mass., has asked for more than \$12,000,000 with which to maintain and expand the public school system during the fiscal year.

Dayton, O. The three-mill tax levy which covers a period of five years, is in effect, a continuation of the one-and-two mill levy passed in previous years. The passage of the three-mill levy has overcome many obstacles in school finances in view of the fact that the board is in debt to the banks for teachers' salaries and there remains only \$200,000 to operate the schools until next February.

Philadelphia, Pa. The board of education has approved the sale of \$1,000,000 worth of bonds to be disposed of over the counter at the Philadelphia National Bank. The bonds will be advertised once a week for three weeks and will be sold to the highest bidding syndicate in amounts ranging from \$100 upward. The present limited amount has been fixed because of the board's inability to use more of the money at this time due to the shortage of building materials.

Columbus, O. The voters have approved a bond issue of approximately \$9,000,000 to be used in the operation of an extensive building program.

The Texas state board of education has purchased \$292,650 worth of school bonds, out of a total of \$436,450 offered to the board. The present administration has broken all records in the purchase of school bonds, the purchases for the last fiscal year exceeding \$1,000,000. Of the bonds purchased recently, 25 per cent was paid in cash on the larger issues and 50 per cent on the smaller ones.

Davenport, Ia. Under the provisions of a new system, the secretary of the board has been appointed as superintendent of the purchase and distribution of supplies. The system calls for a centralized purchasing department to eliminate confusion in the ordering and checking of supplies. The superintendent will have charge of the recording of purchases but he is given discretion in the appointment of a subordinate to do the actual buying.

It is provided that requisitions shall be issued to teachers and special department heads for making out orders for needed articles which may be purchased by them after the orders have been checked by the superintendent of supplies.

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MEMORIAL TABLET AT STATE NORMAL SCHOOL, MINOT, N. D.

The State Normal School at Minot, North Dakota, unveiled the Memorial Tablet presented to it by the Classes of 1918 and 1919 with appropriate exercises on August 3, 1920. Though the school is young, its members were not lacking in patriotic fervor but gave freely of their services

wherever duty called them, even to the last full measure of devotion. The beautiful bronze tablet on the wall of the entrance hall is a constant reminder to succeeding generations of students of the faithfulness of their associates to the call of duty and to the motto of the school, "Service First."



## NEW RULES and REGULATIONS

### CLEVELAND RULES GOVERNING APPOINTMENT OF SALARIES.

The school board of Cleveland, O., has amended its rules governing teachers' salary schedules, and qualifications and conditions of employment of teachers, principals, supervisors and assistant supervisors.

**I. Purpose of the Schedules:** The schedules thruout are designed to serve a double purpose: First, to attract, hold and encourage improvement in service of the highest grades of ability and achievement that the designated salaries can command; and, second, to debar and to eliminate from permanent service those who fail to come up to the minimum standards of ability and achievement that the service requires and that the designated salaries can command. The administration of the schedules is suited to the achievement of this double purpose.

**II. General Principles and Rules to be Observed in the Administration of Schedules:** 1. **Period of Appointment.** Unless otherwise specifically determined, all appointments and reappointments are for the school year for which they are made, or for the unexpired portion of the school year following the date of appointment.

The school year begins on the first day of September of each year and closes on the thirty-first day of August of the succeeding year.

#### 2. First Appointment.

The initial appointment of any person to any type of position will be made solely for the purpose of providing the best available service for the schools. In making selection among several possible candidates, consideration of comparative fitness to render the best service will determine each case of first appointment. The interests or needs of the candidates seeking a first appointment, the mere length of experience, the mere fact of former employment in the schools, or the place of residence of such candidate will not be considered as qualifications for or as claims upon appointment.

#### 3. Period of Probation.

During the first three years of regular service in any type of position, the one so serving will be considered to be strictly "on probation." Continuance of any one longer than three years in any given type of service will be based solely on the interests of the service and not on the interests of the person immediately concerned. Such continuance will be based not only on the success already achieved, but on evidence of growth warranting the expectation of service commensurate with any automatic increases in salary applying to the type of position.

#### 4. Reappointments.

After the three-year probationary period has been passed, reappointment will still be made primarily on the basis of the best interests of the schools; the mere fact of past employment will not be considered ground sufficient to insure continued employment. Except for cause, however, those having completed successfully the probationary period may expect continuous reappointment; provided that the superintendent will be the judge of causes which make reappointment undesirable, and provided further that the board of education may, upon a three-fourths' vote, re-employ any teacher whom the superintendent refuses to appoint.

#### 5. Assignments.

All teachers will be assigned to positions by the superintendent. Such assignment will be made at the time of appointment or reappointment, or as soon thereafter as may be consistent with the best interests of the service. Assignments may be changed by the superintendent at any time.

#### 6. Fixing and Changing of Salaries.

The salary of every appointee will be fixed, consistent with the schedule that applies, upon recommendation of the superintendent, and with the approval of the board, at the time when the appointment is confirmed by the board. The

salary as fixed will not be changed during the period covered by the appointment except as follows:

(a) To correct a clerical error, or an error fixing a salary inconsistent with the terms of whatever schedule may apply.

(b) In case of assignment to service under a salary schedule higher than that under which the appointment was made, a salary higher than that fixed at the time of appointment may be granted as follows:

(1) In case the assignment is to a position carrying a differential, the differential will apply automatically.

(2) Consistent with the schedule applying on recommendation of the superintendent with the approval of the board.

#### 7. Period of Service on Which Annual Salaries Are Based and Times of Payment.

(a) The superintendent, deputy and assistant superintendents, principal of normal school and dean and assistant dean of the School of Education, the directors of the departments of reference and research, housing equipment, attendance, census and vocational guidance, will serve during the entire year, with such vacation as may be considered reasonable; they shall be paid semi-monthly.

(b) The salary schedules for principals, teachers, general and special supervisors and assistant supervisors, are based upon a school year of 38 weeks, exclusive of vacations.

Any one appointed under any one of these schedules for a twelve-month year of service will be entitled to payment at an annual rate, ten per cent higher than the schedule.

The first payment for those serving on a 38 week year under these schedules representing two weeks of work, will be two thirty-eighths of the annual salary; the second, third, fourth, fifth, sixth, seventh, eighth, ninth and tenth payments, representing in each case four weeks of work, will be four thirty-eighths of the annual salary.

#### 8. Pay for Holidays.

(a) When a legal holiday or a school holiday granted by authority of the board of education, or any group of consecutive holidays, next follows the tenth day of absence for which payment is allowed, such holiday or holidays will be credited to the absent teacher in case he or she resumes his or her duties on the next regular school day after the holiday or holidays.

(b) If, after the expiration of the ten days' absence for which payment is allowed, a regular teacher actually teaches on any day of the week in which the holiday or holidays occur, the regular teacher will receive credit for the holiday falling within that week.

(Continued on Page 91)

## SCHOOL BOARD NEWS

Manchester, N. H., will open an evening school for war brides. Only young women born abroad will be admitted.

The school board of Haverhill, Mass., proposes to secure a school superintendent from the West or Middle West. The belief has been expressed that a young man who had made a success in a small town and who was "free from eastern entanglements" should be chosen.

The school board of West Springfield, Mass., is in a deadlock over the retention of Superintendent Carl Cotton, whose term has expired.

The Stevens Point, Wis., school board put its stamp of disapproval on "contract jumping" by refusing to release teachers who had contracted to teach during the ensuing year.

President Anning S. Prall of New York City announces that it will require forty million dollars for new school buildings and sites for the year 1921.

The Detroit school board has decided to discontinue the junior high school. The seventh and eighth grades are to be combined in an intermediate grammar school.

The Boone County, Ind., board of education has increased the school term from seven to eight months and has raised the salaries of teachers in accordance with the minimum provisions of the state law.

State Supt. Will C. Wood of California has ruled that girls under the age of 16 who marry, must attend full-time classes in school, the same as their unmarried schoolmates. Supt. Wood points out that there is nothing to prevent girls of this age from accepting proposals or contracting marriage, but they have no adequate excuse, except illness, to prevent them from attending the regular classes.

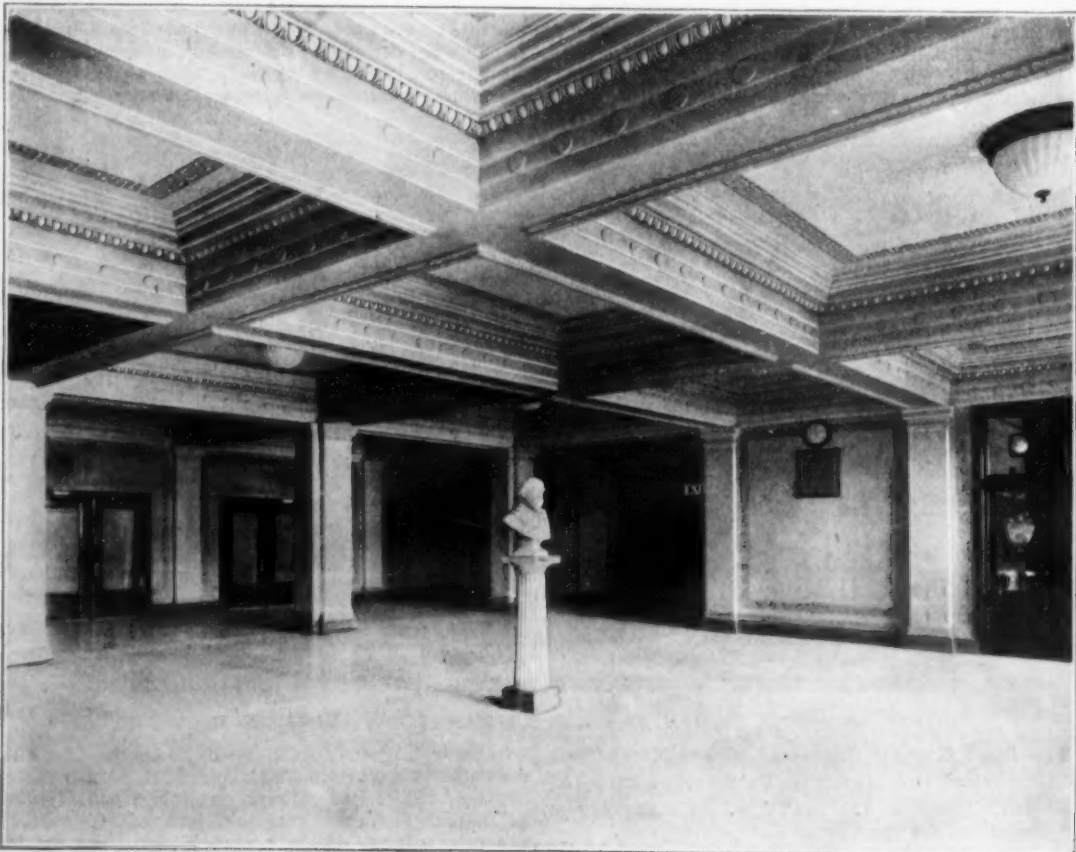
The Richmond, Va., school board suggests that the high cost of paper may result in a return to the old time school slate and pencil.

Haverhill, Mass., contemplates the installation of fire alarm boxes in the schools.

Wichita, Kans. The board of education will begin the manufacture of its own furniture with the completion of the new Washington building. A workshop will be opened in the old building where desks and chairs will be turned out.

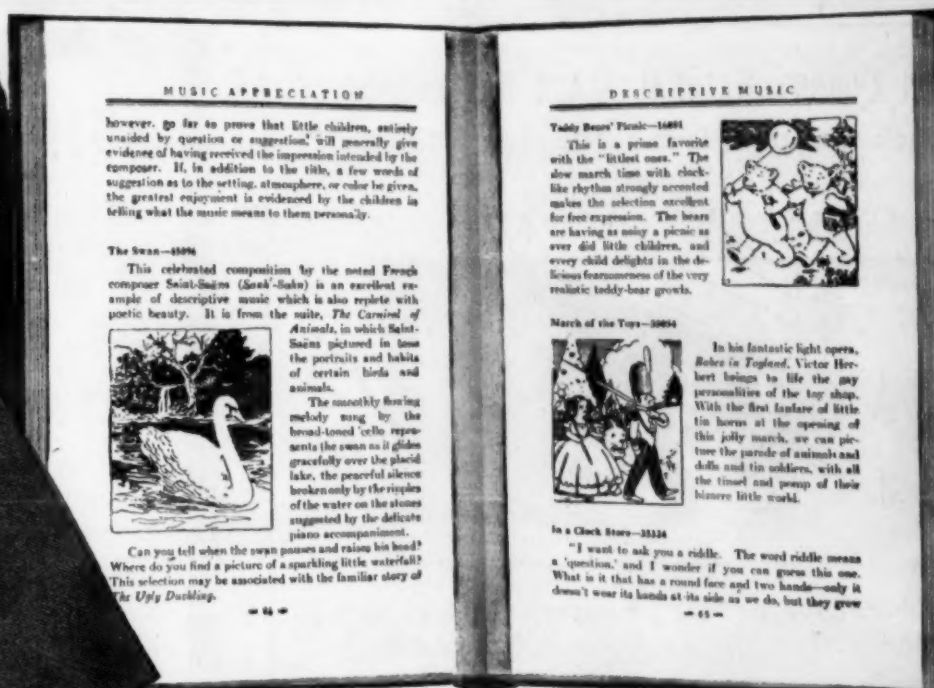
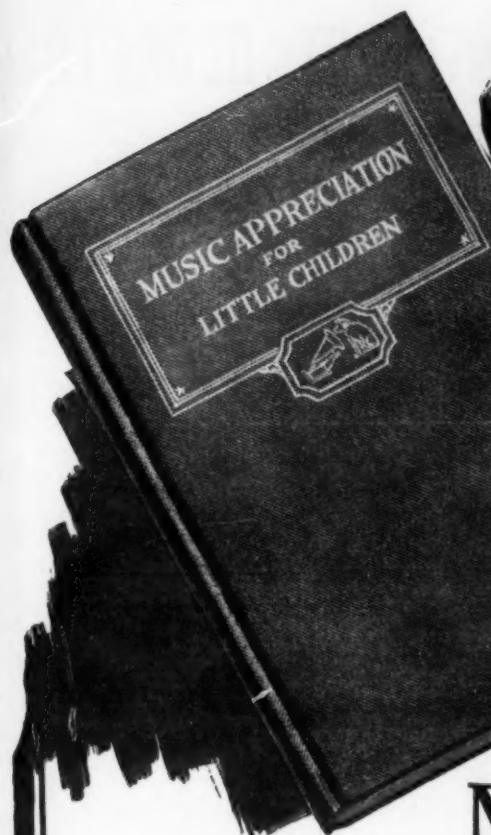
Mr. Tom McNeal, member of the Kansas State

(Concluded on Page 58)



ENTRANCE HALL, CARTER HARRISON TECHNICAL HIGH SCHOOL, CHICAGO, ILL.  
Mr. A. F. Hussander, Architect.





## Announcing Music Appreciation for Little Children

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A guide for parents and teachers in *using* music in early childhood, where it rightfully belongs.

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This book is without question the most complete work yet published upon the proper *beginnings* of the study of real music. It marks an epoch in music study. It is an absolutely pioneer work in a broadly cultural yet eminently practical field.

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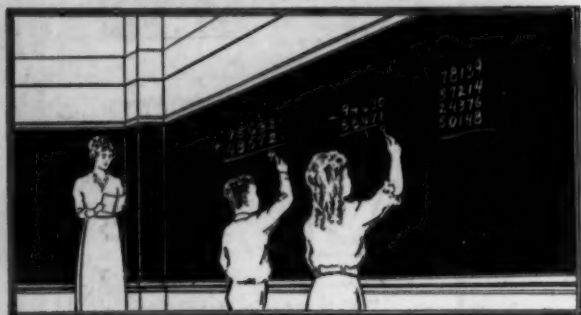




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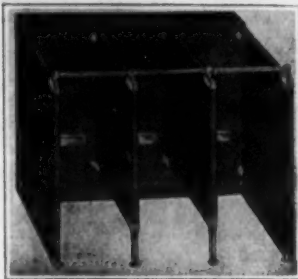
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Large Illustrated Catalog for the asking

**KEENAN STRUCTURAL SLATE COMPANY, Inc.**  
First National Bank Bldg., BANGOR, PA.

## BUYING WITHOUT REGRETS

The "law of compensation" is relentless.

"Nothing for Nothing" applies in every realm of effort. But the man who makes an unwise purchase buys something that—like a deficit, is less than nothing; for it requires additional outlay in later years.

## NATURAL SLATE BLACKBOARDS

from our quarries represent the acme of economy and educational efficiency. They require no upkeep, while artificial boards must be resurfaced, repaired and replaced regularly. In comparison, the word "economy" is defined in its truest sense. Slate being non-porous does not absorb anything, so cannot disintegrate. It is finished with a beautiful, velvet smooth surface that does not become gray with age or use; that makes writing a pleasure and reading a relief to the eyes of the students and teachers. That is why our Natural Slate Blackboards combine the utmost efficiency with the utmost of economy.

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(Concluded from Page 56)

textbook commission, recently reported that more than a half-million dollars have been saved by the people of Kansas by the state publication of school books, and that not less than \$100,000 will be saved in the next three years on a geography now being published, which will sell for 50 cents less than the same or similar books published by commercial houses.

New Ulm, Minn. The attorney general of Minnesota has ruled that the school board may not lawfully continue the compulsory teaching of German in the public schools. The opinion which was given to Supt. Arnold Gloor, is considered a blow to the policy of the New Ulm school board, which had proceeded according to an old rule, long in effect and which had not been rescinded. A recent consideration of the matter by the board resulted in that body being divided equally on the matter of German language teaching in the elementary schools.

Philadelphia, Pa. The board of education has recently been urged to discontinue an old rule allowing, at the discretion of the superintendent, one session of school in bad weather. It is pointed out that the rule, while used not very many times in a year, always causes a good deal of uncertainty and tends to disorganize the school routine. The practice, it is held, has been discontinued in the schools of other cities throughout the country.

Objection to the custom is based on the fact that many of the children live near the schools and are better housed and more comfortable in school than in their own homes. In the crowded districts, when the children leave school at noon, their parents are at work and they are quite likely to remain on the streets.

An acute shortage of textbooks and supplies faces the public schools of Philadelphia. The condition is apparently due to a lack of funds since the original appropriation in the budget was too small, and the same was not supplemented upon the request of the supply department.

It is estimated that about \$100,000 will be needed to purchase even the minimum requirements for the schools, since the requisitions turned in last year called for about \$115,000 worth of books. The cost of books for last year was

\$175,000 but since then the actual cost has risen to \$230,000. This year the price of books has risen 50 per cent and the population has increased 10 per cent. As a result there should be an appropriation of \$400,000 instead of \$185,000 to keep the purchases near the standard set by necessity.

Supt. M. C. Potter of Milwaukee, Wis., in a communication to the public, has given his endorsement to the proposal for an all-year school divided into terms of three months each. The plan has the advantages of better and shorter courses for the students, full-time use of the school plant, better salaries for the teachers and more rapid promotion of all pupils.

West Allis, Wis. The board has adopted the six-six-plan of school organization for the high school. The public schools have been operated on this plan for the past three or four years. It is planned to concentrate all the seventh and eighth grades in the new high school building.

Phillipsburg, Pa. Radical changes of a progressive nature in the grading system of the schools have been adopted for the next school year. Beginning September, the pupils will be marked either N. or P. to denote their progress, instead of the usual percentage basis. The letter N. means that a pupil has not passed satisfactorily three-fourths of the required work, while the letter P. will indicate that a pupil has passed the required work.

All honors formerly designated and awarded to members of the graduating class have been eliminated. The salutatorian and valedictorian will be selected each year by ballot by the graduating class.

A requirement of 75 credits for graduation is made in place of 72, with 72 academic and three physical training. The academic credits must represent not less than twenty counts in English, ten in mathematics, ten in a language other than English, five in history and five in science.

At the end of each school month, parents will receive a copy of each pupil's grade card, with a return coupon, to be signed and sent back to the teacher. The signed return cards are kept on file and used for reference purposes.

The part-time schools, organized to conform

with the new compulsory school law, opened in San Francisco about September 10. The locations are to be selected according to the enrollment, schoolrooms to be opened in the neighborhoods where the largest number of scholars are employed. The enrollment is progressing well, Director C. L. Carlsen said, the employers so far cooperating with the new school system in establishing the work.

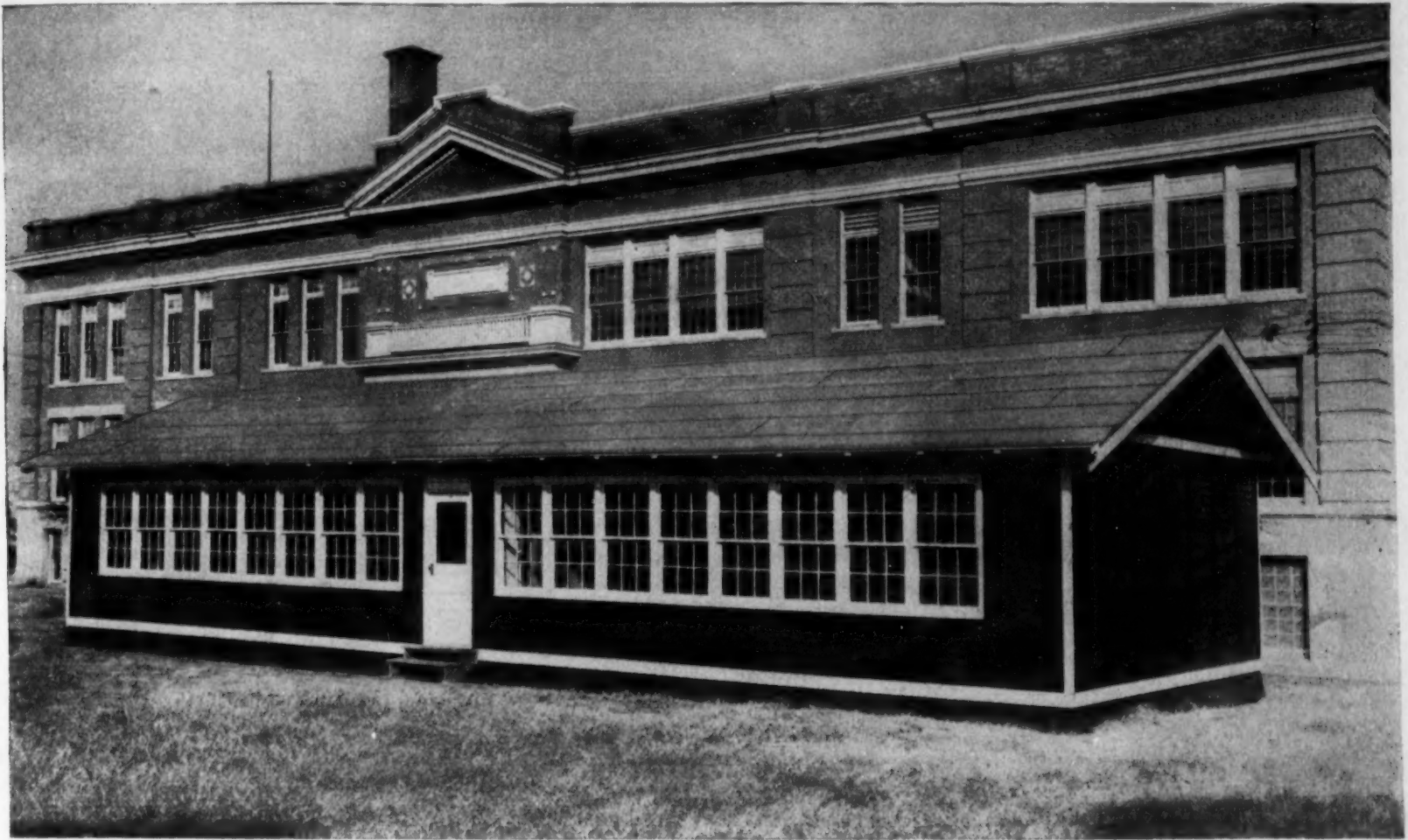
Locations for the part-time schools have not yet been found, as it has been found difficult to obtain housing in the downtown and factory districts, where most of the schools will be established, so as to be convenient to students, and employers alike. Children will be obliged to attend school at least one hour a week, and as many other hours as may be arranged with the employers.

Besides the regular high and elementary grade work to be taught, there will be instruction in the different trades, including sheet metal work and drawing, millinery, dressmaking, cabinet work and other vocations, such as will benefit the children in the work they are doing. For this reason, it is believed by Director Carlsen, employers will benefit by arranging for more time than the law demands for their employees to attend the classes.

Under the compulsory school law, Carlsen says, every child under 17 years old is obliged to attend school four hours a week, between the hours of 8 in the morning and 5 in the evening, which means that the employer must pay for the four hours the child spends in school, as the school hour cannot be taken at the luncheon time.

Whether a child attends evening school, or is taking a correspondence course, or has special tutorage evenings, or not—he or she must attend the part-time schools four hours a week.

The exceptionally large attendance in the summer elementary and high schools of Cleveland the past summer appears to indicate that the twelve-month plan will be forced upon the administrative department within the near future. It has been revealed to the instructors that from a third to a half of those enrolled, were there not to make up work in which they had failed, but to gain a semester.



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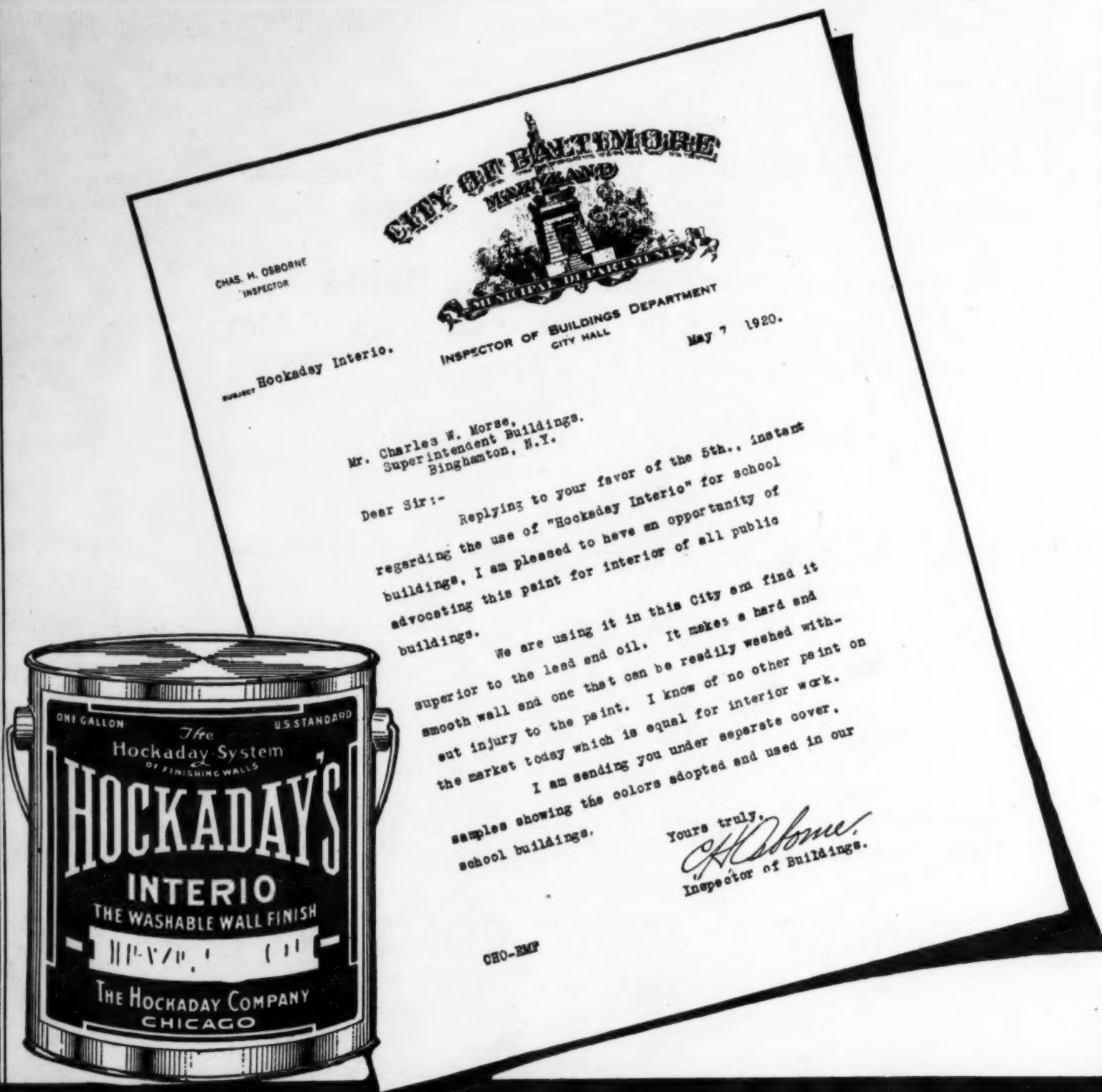
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MARYLAND  
MUNICIPAL DEPARTMENT

CHAS. H. OSBORNE  
INSPECTOR

SUBJECT: Hockaday Interio.

INSPECTOR OF BUILDINGS DEPARTMENT  
CITY HALL

May 7 1920.

Mr. Charles W. Morse,  
Superintendent Buildings,  
Binghamton, N.Y.

Dear Sir:-

Replying to your favor of the 5th., instant regarding the use of "Hockaday Interio" for school buildings, I am pleased to have an opportunity of advocating this paint for interior of all public buildings.

We are using it in this City and find it superior to the lead and oil. It makes a hard and smooth wall and one that can be readily washed without injury to the paint. I know of no other paint on the market today which is equal for interior work.

I am sending you under separate cover, samples showing the colors adopted and used in our school buildings.

Yours truly,  
*Chas. H. Osborne*  
Inspector of Buildings.

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Before deciding on any wall finish investigate INTERIO. It will save you 30 per cent on material, 30 per cent on labor and cut your upkeep in two.

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## Dark Days Are Coming

and when they do class work in modern school buildings which are equipped with proper lighting equipment will not be interrupted. The increased use of school buildings for community work, night schools and vocational schools has made greater attention to artificial lighting imperative. Professor F. C. Caldwell of the Ohio state university advises greater attention to lighting equipment in the school buildings of the country, unless all of the people are to wear glasses in the future.

The High School at Newton, Iowa, is but one of many modern school buildings which are lighted with Denzar, a scientifically designed, totally enclosed lighting unit which produces the maximum amount of light from the Mazda-"C" Lamp. Its special enamelled translucent bowl gives maximum diffusion with a total absence of glare.

*If you wish to know more about this modern lighting for school-rooms, write for the Denzar catalogue and give the name and address of your school.*

The new high-school at Newton, Iowa, for which Temple & Burrows of Davenport, Iowa, were the architects, is typical of the modern high-school buildings now being erected in this country. It is equipped with latest facilities to safeguard the health of the pupils and develop them both mentally and physically.

Prominent among the other facilities is the adequate lighting equipment. Forty Denzars are used to illuminate the class-rooms, and special Beardslee fixtures are used at the entrances and in the main corridors. Denzars were chosen for this new high-school because they produce a soft sun-like radiance without glare or harsh shadows. The light being distributed evenly on both desks and blackboards eliminates eye strain and fatigue. They were installed by the City of Newton.

*The unit of Day Brightness Produces Soft Sun-light Radiance Without Glare or Harsh Shadows.*

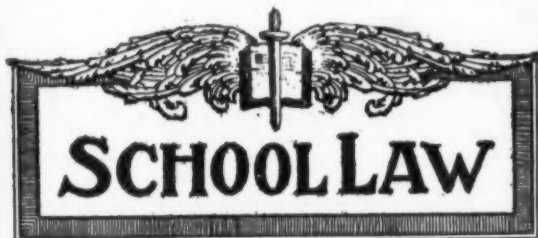
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**DENZAR**



### SCHOOL LAW AND LEGISLATION.

The Nebraska Teachers' Association adopted a resolution favoring "the faithful fulfillment of contract obligations." Superintendent A. H. Dixon of University Place, in introducing the resolution, said:

"Whether a superintendent or teacher has the right to break a contract, made and entered into in good faith, needs no discussion. A contract is as binding on the teacher or superintendent as on the board of education, and neither party has any legal or moral right to refuse to comply with the conditions there laid down and should they do so, they lay themselves liable for damages, if such damages to the district can be shown before the court. Whether such damages could be collected in the average instance, is another question, but the moral responsibility still remains upon the party thus repudiating their obligation, and surely the school is no place to set up such standards. If children see their teachers, the people to whom they look for guidance in these things, ignoring their legal and moral obligations, what can we expect of these children when they come to be men and women? No man, a teacher or any one else, can repudiate his contract obligations, and retain his self-respect.

The school board of Portland, Oregon, is disturbed over desertions from the teaching force. The Morning Oregonian of that city commends upon the situation as follows:

"It is plain that there is adequate recourse against teachers who have resigned without adequate notification to the board. Their certificates may be revoked and the offenders disqualified as teachers in the Oregon schools during the re-

mainder of the school year. Doubtless this is justice. It seems but light punishment, if the deserters had intended to seek employment in other schools of the state, to give them a year in which to reflect upon their plain neglect of duty and utter disregard for ethics."

Thomas E. Johnson, state superintendent of Michigan, will ask for legislation providing for higher standards of training for teachers. Six weeks' normal training is now exacted of rural school teachers. The time is to be extended to one year.

In Indiana it is proposed to make the teachers pension law state-wide, and compulsory, assessments paid by teachers for less than five years to be retained by the state, the minimum term of service required for sick or disability benefits to be fixed at ten years, the minimum term for voluntary retirement at twenty-five years, and the annual pension to be fixed at \$900.

Two members of the Venice, California, school board have been asked to resign because they employed, contrary to the law, an immediate relative, a minor, during the summer months to assort school books.

#### Schools and School Districts.

The county board of education, when the best interests of the school demand it, may separate or divide any school district into two or more districts and provide for election of a board of trustees for each district, and do all other things for government of districts, as provided by Georgia Acts 1911, pp. 94-104, Park's Annotated Pol. Code. § 1565 (v) for organization and control of school districts.—Tyson v. Board of Education of Carroll County, 103 S. E. 158, Ga.

Construing, so as to give effect to the provisions of all, Texas Gen. Laws, 34th Leg. (1915) c. 36, § 4a (Vernon's Annotated Civil Statutes, Supp. 1918, No. 2749d), giving district general supervisory control of action of county school trustees in creating, changing, and modifying school districts, and section 10 (section 2749h), as to appeal to and from county school trustees, with Vernon's Sayles Annotated Civil Statutes 1914, art. 4510, as to appeal to higher from lower school officers, appeal to higher school officials from refusal of school trustees to form school

district from parts of other districts is a condition precedent to remedy in the district court.—Jennings v. Carson, 220 S. W. 1090, Tex. Com. App.

#### School District Government.

Record of a county board of education which discloses the motion, the name of the board member making it and the result of the vote by an entry "motion carried," is a substantial compliance with Gen. Code, § 4732.—Edward v. Matthews, 127 N. E. 462, Ohio.

Where a member of a board of education signs a resignation and delivers it to the president of board, and, without any action thereon, a successor is chosen at the following city election, who is thereafter recognized as such by other members of the board, such recognition is tantamount to an acceptance of resignation and ends the office of the resigning member, whether or not the election was invalid for want of a prior acceptance, in view of Kansas Gen. St. 1915, § 9067.—State v. Board of Education of City of Council Grove, 189 P. 915, Kans.

Kentucky St. § 4474, authorize the trustees of a school district operated under general school laws to dismiss superintendent of graded school without notice or cause, notwithstanding other statutes applying to other districts requiring cause, and such section must be read into the hiring contract, so that a superintendent's petition to recover damages for wrongful dismissal did not state a cause of action, and the court properly gave judgment for defendant notwithstanding the verdict.—Maxey v. Board of Trustees of Elizabethtown Graded School Dist., 220 S. W. 732, Ky.

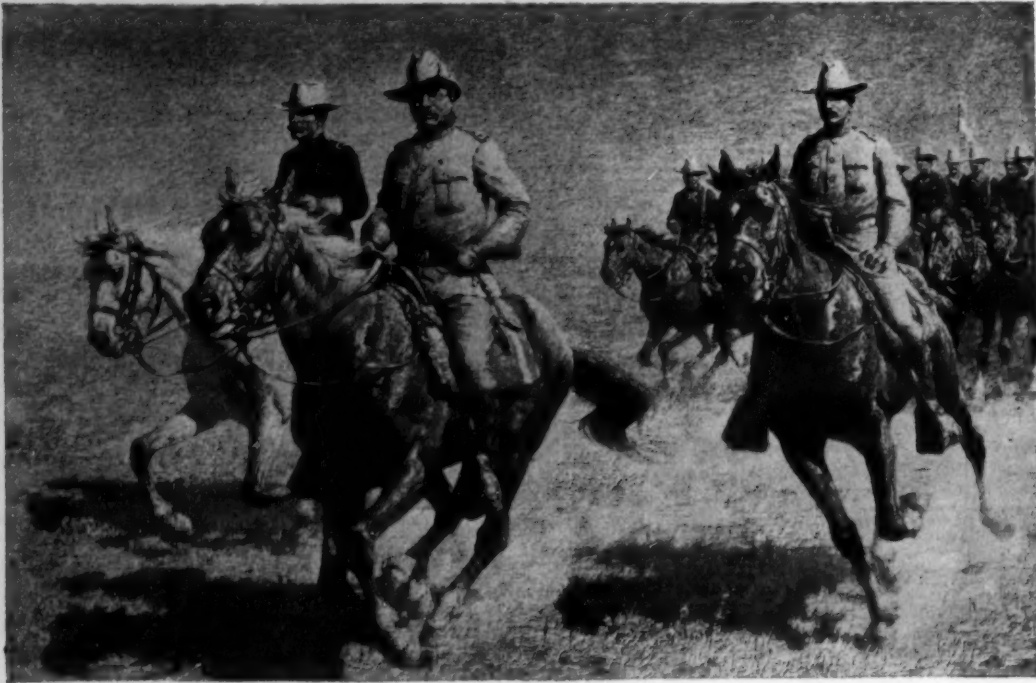
#### School District Property.

Vernon's Sayles' Annotated Civil Statutes, 1914, arts. 2904n, 2904o, requiring in certificate as a condition precedent to erection of a school building, which are general statutes, do not take away the authority given the city of Dallas by its charter granted by Sp. Acts Thirtieth Leg. (1907) c. 71, art. 5, § 1, to construct necessary school buildings.—U. S. Fidelity & Guaranty Co. v. Burton Lumber Co., 221 S. W. 699, Tex. Civ. App.

A school district was bound to pay the contract price of a schoolhouse in accordance with



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its contract, and neglected no duty it owed to the surety on the contractor's bond, given as required by Minnesota Gen. St. 1913, § 8245, in honoring an order given by the contractor to defendant bank for money advanced to pay claims for labor and material, though the surety which was liable for such claims, had previously notified it not to pay any orders given by the contractor.—*New Amsterdam Casualty Co. v. Wurtz*, 177 N. W. 664, Minn.

Where statute requires bond by contractor for erection of schoolhouse to be signed by two sureties, and an approved bond was signed by only one, the surety in an action by a materialman on bond might rely upon the performance of school board's duty to see that a proper statutory bond was executed before contract was let, and, the bond being accessible to interested parties, the surety is not estopped to question its validity, though the goods were furnished in reliance on the bond.—*Nye-Schneider-Fowler Co. v. Roeser*, 177 N. W. 750, Neb.

Where the contract for the construction of a school building expressly made the specifications a part of the contract, a stipulation in the specifications requiring the contractor to give a bond guaranteeing payment for labor and materials was a part of the contract.—*Builders' Material & Supply Co. v. J. B. Evans Const. Co.*, 221 S. W. 142, Mo. App.

### School District Taxation.

There being nothing in a statute making the manner of publication of notice of election to authorize the issuance of city school bonds under it essential to the validity of the election, the provisions of the statute as to notice are directory and not mandatory.—*Board of Commissioners of City of Hendersonville v. C. N. Malone & Co.*, 103 S. E. 134, N. C.

Where ordinance authorizing issuance of school bonds after approval by election was published in full in a paper of large and general circulation, and at the election every qualified voter voted on the proposition, and it was sustained by a large majority, ordinance and consequently election cannot be attacked on ground ordinance was published only once; *Municipal Finance Act*, § 20, not making publication for four succes-

sive weeks essential.—*Board of Commissioners of City of Hendersonville v. C. N. Malone & Co.*, 103 S. E. 134, N. C.

Election on issuance of school bonds in city was valid, the ballot used carried the words, "For School Bonds" or "Against School Bonds"; whereas, *Municipal Finance Act*, § 22, provides the ballot shall contain the words "For the Ordinance" or "Or Against the Ordinance," a directory requirement.—*Board of Commissioners of City of Hendersonville v. C. N. Malone & Co.*, 103 S. E. 134, N. C.

Information given high school teacher in town by school committee, at her request, that reasons for which her dismissal was proposed, of which she had been notified by letter in due time, were "conduct unbecoming a teacher and insubordination," was a sufficient compliance with *Massachusetts Statutes*, 1914, c. 714, § 2, in absence of demand for specifications.—*Duffey v. School Committee of Town of Hopkinton*, 127 N. E. 540, Mass.

The Supreme Court of South Dakota has recently held the consolidation law constitutional in that it is applicable to independent districts and permits the consolidation of the independent and common schools. The decision removes the chief point of contention in the operation of the law, namely, that a separate majority vote in each of the combined districts must be obtained rather than a majority of the whole district.

### TEACHERS AND ADMINISTRATION.

Burlington, Ia. A teachers' club is to be established in the old St. Cecelia building. The club will make its own purchases and manage the eating house to be established. A man and a woman will be engaged to take charge of the clubhouse.

State Supt. Thomas E. Finegan of Pennsylvania has established a State Bureau of Teachers' Service to overcome the shortage of teachers in the Keystone State. Applications and qualifications of teachers are filed in the offices of the bureau at Harrisburg and recommendations are made, where requested, according to the position that offers greatest possibilities to the teacher. In the first four days of the bureau's business, 150 re-

quests were received for teachers and thirty places were filled.

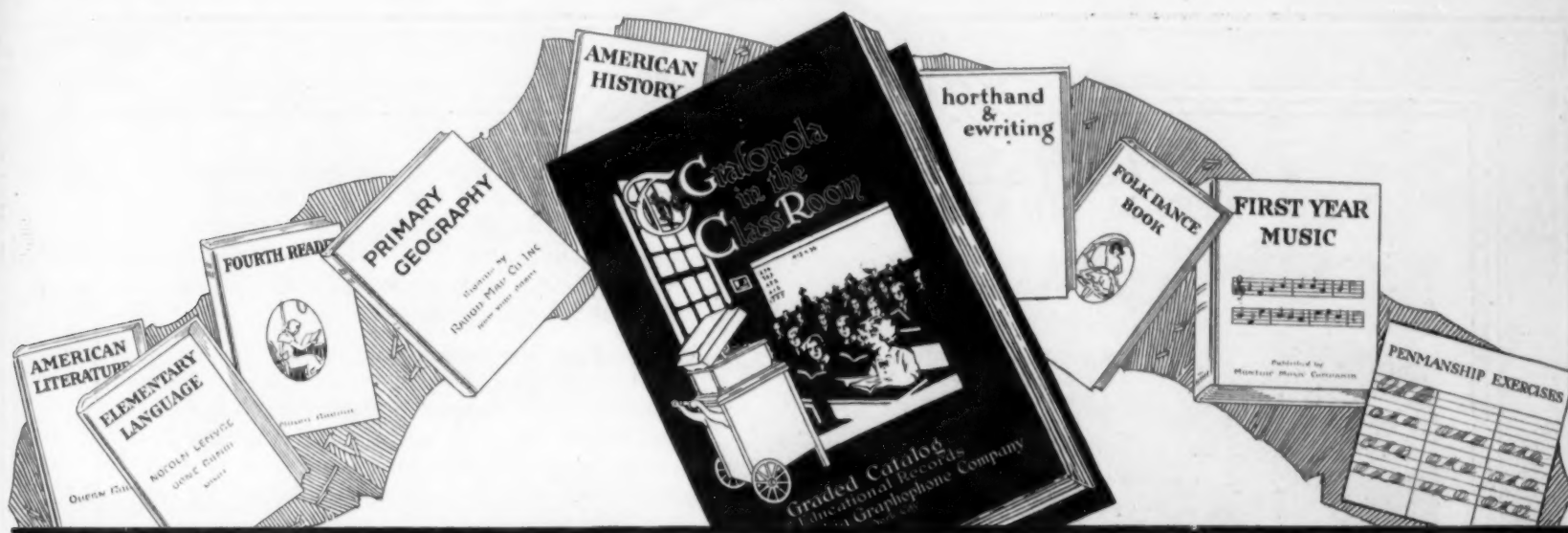
Detroit, Mich. The city controller has refused to honor the board's payroll providing for bonuses of \$300 for each teacher. The controller bases his action on two reasons, the lack of funds and the illegality of the resolution granting the bonuses.

President J. S. Hall of the board of education, replying to the controller's statement, holds that there is no lack of funds because the primary school fund provided more than enough for the salaries; again, he ridicules the statement that the resolution is illegal, by saying that the city controller has no authority to pass on the legality of a matter and no predecessor ever sought to dictate as to the legality of the board's actions.

Dr. John H. Finley, Commissioner of Education for New York State, in speaking before the delegates to the Golden Typographical Union recently, declared that no teacher should be a member of a union. Dr. Finley regards a teacher as in the same class as a soldier—an officer in the army of future defense. Any person whose income is provided thru taxation is normally precluded from seeking to align a great class of workers in varying occupations in favor of swelling his emoluments. If he has claims, they should be presented and sustained in a different manner.

Lancaster, Pa. Mr. S. Edward Gable, for sixteen years instructor in the boys' high school, has resigned. The resignation came simultaneously with a statement issued by the local chapter of the American Federation of Teachers in which they deplore the recent declaration of State Supt. Finegan that teachers may not join labor organizations. The teachers hold that since the board disregarded Dr. Finegan's request to halt elections of teachers pending the receipt of a decision, and filled all but four positions, it could not now reinstate the 53 members of the association. They point out that there is a lack of understanding of the professional spirit and social idealism connected with membership in the organization and label the discussion as a gross misconception of the entire movement.

Barron, Wis. The board has purchased a residence for the high school principal, the principal to pay rent for the use of the house.



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Music Appreciation Records, Penmanship Records, etc., with explanations of how to correlate this music with History, Geography, and other subjects. For *Rural Schools* this Catalog contains carefully chosen lists of records which will reveal the wonders and bring all the joy and inspiration of music to thousands of boys and girls remote from civic centers.

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57

## BUILDING AND FINANCE.

(Continued from Page 55)

The superintendent of schools is to be consulted by the secretary in connection with the purchase of supplies. At the end of every school year, the secretary is to confer with all the department heads and principals for the preparation of the yearly budget of supplies.

The new system provides for the accurate checking of all expenditures and makes possible the purchasing of supplies in quantity in the case of small articles which are used in various departments.

The school board of Council Bluffs, Ia., recently entered suit against E. A. Wickman and the First National and Savings Bank of Omaha, Neb., for \$100,000. It is charged that Wickman as agent for the bank, bid in school bonds of the city amounting to \$475,000. Later the bank refused to complete the bond purchase which resulted in heavy depreciation of the issue.

Wickman, who also had contracted to build the school, failed to carry out the contract and a Des Moines firm undertook the work of erecting the school building.

New York, N. Y. The board of education has asked the city authorities to approve a budget of \$143,549,019 for the operation of the schools the next year. Of this amount, \$91,904,274 is needed to cover the running expenses of the school system, \$24,000,000 for teachers' salaries, and \$75,244,886 for the general school fund.

The board has adopted a building program which calls for 45,846 new sittings, including eighteen elementary schools and additions, 51 portables, four high schools, a training school for teachers, a school for the deaf, and a supply depository.

Toledo, O. The city recently carried a bond issue for \$11,000,000 and a special two-mill levy for higher teachers' salaries. The maximum for the grades for 1920-21 will be \$2,000 and for the high schools \$2,400.

Chicago, Ill. The Monthly Bulletin of the Illinois Society of Architects contains a significant editorial expression on the local schoolhouse construction situation. It reads:

"The editor is creditably advised that the

school board of Chicago expects to award contracts for construction of future buildings on a cost plus percentage basis, or have same erected by direct day labor; that this will be done not with the idea of securing more economical construction, but in order to increase the payroll brigade of the city hall and thus extend the influence of the Thompson-Lundin machine.

"The editor predicts that if this plan is carried out and figures are ever made available showing the comparative cost of the school buildings erected under such a plan that it will be found that the cost of the school buildings of Chicago will be increased from 40 per cent to 60 per cent over what they would cost under the present system of competitive bidding.

Saugus, Mass., will receive \$21,068 as state aid this year, or about \$7,000 more than that allowed last year.

Commissioner Ferguson of the St. Paul, Minn., schools has issued a report on the school building situation in which he asks for an appropriation of between \$10,500,000 and \$12,500,000 within the next ten years. Mr. Ferguson recommends a bond issue of between eight and ten million dollars in addition to the \$2,500,000 not yet used for schools, and urges that at least \$1,000,000 be spent each year during the next ten years, for school purposes.

The program as outlined by Mr. Ferguson provides for the replacement of three grade schools, the construction of buildings to replace three schools, the construction of three grade schools, and supplementary buildings. Five junior high schools, additions to the central high and the mechanic arts high, and the construction of the first unit of an industrial school are also included in the plans.

Des Moines, Ia. The school tax levy for 1920-21 has been fixed at 56 mills, providing a school fund of \$2,042,000. Most of the half million dollar increase will go toward higher salaries for teachers.

New York, N. Y. The board of education faces a serious problem in its school building program due to the increasing school population and the apparent inability of the school authorities to

keep up with the school building. It is pointed out that there are 57,512 children in part-time classes, 108,000 who attend in double sessions, and there is an estimated increase in registration for this fall of 9,000 pupils.

In carrying out its seat-for-every-child policy, the board must give consideration to several factors. A summary of figures shows that there are more than 230,000 children whose school seats do double duty. They are distributed as follows: Four-hour double session, 57,512; five-hour session, 108,000; part-time, 57,512.

Pres. A. S. Prall has worked out a policy to meet the situation, and to reconcile the needs of the schools with the financial ability of the city. Since the present board has been in office, \$25,000,000 have been set aside for school buildings and most of the money has been contracted for. The present contracts will provide approximately 40,000 sittings, but to provide a seat for every child, 75,000 more will be needed, or a total of 115,000 sittings. A program of steady school construction, extending over a period of years, is recognized as the only solution to the demand for accommodations.

An estimate of President Prall of the 1921 building needs is as follows: Construction of eighteen elementary schools and additions at a cost of \$20,600,000; a training school building, \$1,359,000; school for the deaf, \$1,422,000; four new high schools, \$7,675,000; new supply depository, \$1,250,000; headquarters building and site, \$3,600,000; playground improvements, \$595,000.

The school board of Seattle, Wash., is planning to place on sale \$1,000,000 worth of bonds to provide money for buildings and other school necessities. The action of the board is due to the pressing demand for money for school improvements.

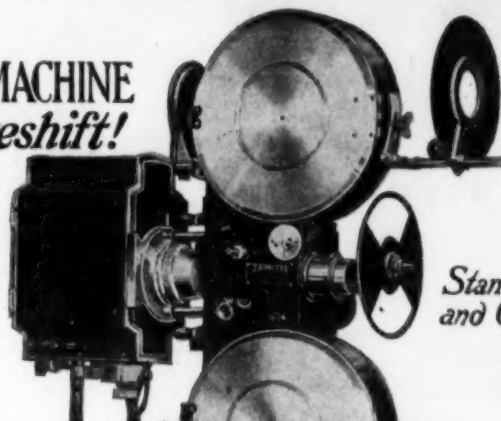
Governor Townsend of Delaware has approved the bill making changes in the school code of the state. The bill provides for additional state aid for schools. The city of Wilmington, tho it has not accepted the school code, and will continue as an independent organization, expects to receive aid from the state fund.

(Concluded on Page 68)

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(Concluded from Page 66)

Oakland, Calif. The budget for the schools for the coming year has been fixed at \$3,671,626. The adoption of the budget followed a turbulent session which was characterized by charges of politics and extravagance in the operation of the schools. The charges were vigorously counter-attacked by Supt. F. M. Hunter and Mrs. Daisy Short.

The business department of the Washington, D. C., schools has been put in condition for operating the schools in an increased school fund provided for in the district appropriation bill. The additional appropriation of \$980,360 will be largely utilized this year for increased salaries of teachers and school officials. A large part of it will also go toward the construction and the remodeling of school buildings.

"Millions for efficiency but not one cent for show," has been adopted as the slogan of the citizens of Columbus, O., in supporting the board's proposal for \$5,844,000 in bonds for school buildings. It is planned to place the four new high schools first on the building program, while the four grade schools will be rushed as soon as bonds are sold.

The annual report of Supt. John Hopkins of Galveston, Tex., included recommendations for improvements in the schools in the way of more classrooms and improved facilities, the acquisition of additional school grounds and the erection of a modern junior high school. The greatest need of the schools, in the opinion of Supt. Hopkins is more classrooms but sufficient money will not be available until the increased tax comes due in January.

The school board of Dayton, O., has only \$380,000 with which to operate the schools at the opening in September. This will make it necessary for the schools to borrow in November, the money to be repaid after the February tax distribution. The other alternative is to issue short-term bonds. Two other loans were repaid from the August tax distribution.

Business Manager R. M. Thomas of Portland, Ore., has issued a statement of the financial condition of the schools, giving a comparison of the moneys received and disbursed during the first

six months of the year 1920 and that for the same period in 1919. The statement of the amount of money from the insurance and sinking funds invested in government securities shows that there are invested \$61,100 in Liberty Bonds and \$61,740 in War Stamps for the insurance fund. In the bond sinking fund there are \$256,150 in Liberty Bonds. In the building sinking fund there are \$73,450 invested in Liberty Bonds.

One of the school directors of Monroe township, Pa., misappropriated \$4,387 and now the entire board is legally held accountable. While the members, except one, are held to be innocent of intentional wrong the court holds that they have been negligent and must make up the shortage.

State Commissioner C. N. Kendall of New Jersey is sponsor of a movement for restoring the schoolhouse at Bordentown, in which Clara Barton taught. The school children of the state have raised a "penny fund" for the restoration and rededication of the building.

A million-dollar bond issue is needed to relieve congested conditions which exist in the school buildings of Louisville, Ky., according to Dr. Albert B. Weaver, president of the board of education, who began urging the necessity of more money for the schools a few days ago.

"The present income is not sufficient," said Dr. Weaver. "We need a new girls' high school and many of the other schools need new heating plants, repairs to the roofs and painting. We could use a million-dollar bond issue nicely."

According to Dr. Weaver, the board has anticipated taking such a step. "I think present conditions will force us to take the step," he said. There are sixty-three school buildings in the city and scattered among them are sixty-four portable schoolrooms, which have been pressed into service to relieve conditions. Samuel D. Jones, business director of the board, said it would take six ten-room buildings to relieve the overflow of pupils now being absorbed by portable buildings.

Samuel L. Scott, superintendent of Clark county, Ind., schools, is seeking authority from the state board of education to continue in operation nineteen school buildings in the county, which

last year had an attendance of twelve or less. The state board has ordered that the state aid should be withdrawn from such schools on the ground that they are not economically sound.

Prof. Scott cites the fact that the condition of roads in the county prevents satisfactory transportation of pupils to other schools.

Efforts of the McCracken county board of education, Paducah, Ky., to secure the maximum school levy of 50 cents under the state act of 1920 failed when Chief Justice John D. Carroll, Frankfort, refused to override the decision of the circuit court, which denied the board's mandatory injunction against the fiscal court.

The act under which the board sought the 50-cent levy became operative after the fiscal court had ordered a 30-cent levy, 5 cents above the minimum established by the new law, and the chief justice held that the fiscal court had performed its full duty.

Appellate Judge Gus Thomas handed down an opinion in another school case which insures the construction of a new high school in Leslie county. Judge Thomas overruled a motion to dissolve the mandatory injunction granted W. H. Eversole requiring the county board of education to establish a high school in the county.

Millersburg (Ky.), Military Institute has been taken over by the Bourbon county board of education to be converted into a county high school. Various changes in the physical plant are planned. It will be remodeled and brought up to date. An injunction sought by citizens of Millersburg to prevent the transfer was denied.

State Supt. Harris Hart of Virginia, has estimated that the school fund for 1920-21 will be increased by \$1,082,457, or 33 3/5 per cent over that for last year. The total cost of operating the school last year was \$10,000,000 and at least \$5,000,000 more will be needed to conduct the schools on a satisfactory basis.

The annual budget of the school board of Springfield, Ill., provides for an educational fund of \$671,021 and a building fund of \$469,304.

The Detroit school board voted \$718,654 for teachers' bonuses and then was told by the corporation counsel that the action was illegal. The matter is to be fought out in the courts.

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Minneapolis, Minn. A serious lack of classroom accommodations has been temporarily averted by the offer of twenty-two public buildings for school purposes. The list includes churches, lodge halls and private assembly halls.

The Philadelphia board of education is facing the possibility of a curtailment of textbooks this year due to a lack of funds. According to Dr. Louis Nusbaum, associate superintendent, there is a fund of about \$100,000 with which to meet a bill of \$430,000 for books and supplies.

Pontiac, Mich. The cost of operating the public schools this year has reached \$767,749, or double the cost for last year.

Boston, Mass. The schoolhouse commission has provided housing for all of the 112,000 public-school children despite the scarcity of building materials. A number of the buildings have been remodeled and 175 portables have been brought into use to meet the increased demands. The total enrollment for all schools in the city has reached 130,000, or an increase of about 3,800 over last year.

Elmira, N. Y. Because of the increased cost of maintenance, the board has raised the tuition fee for outside students. The new rates are \$48 for grammar-school students, \$72 for academy, and \$100 for vocational school.

Supt. H. C. Weber of Nashville, Tenn., has compiled statistics showing that enrollment in public schools has increased during 1919 and 1920, while the pupil cost of instruction reached \$30.46, or a decrease of more than one dollar

over that for 1917-18. The city schools, including day schools only, cost the taxpayers \$526,533 for 1919-20.

There is a movement on foot to triple the size of the United Township High School District, East Moline, Ill., by annexing non-high school territory, and providing additional building facilities.

The Elliot School, Jamaica Plain, Boston, celebrated its 231st anniversary September 8th, 1920. It was founded in 1676 and is still rendering service.

There are 17,000 high schools in the United States. Ten per cent of the number are located in the cities, but they enroll 52 per cent of the total number of students. The rural high schools are higher in number but smaller in attendance.

New Orleans requires an additional 1½ mill tax to meet the increased cost of conducting the schools. The school board asked that the levy be made without a referendum. The mayor refused. The school board resorted to a mandamus. The court granted it. The city appealed to the higher court. Before a decision could be reached, which would reverse the lower court, the additional tax was yielded to.

The Manchester, N. H., school committee has contracted for three new school buildings at a total cost of \$1,312,254.

The teachers of Philadelphia will take an active part in the floating of \$3,000,000 worth of school bonds. When the bond brokers failed to accept the issue the board determined to sell them to the general public.

At Minneapolis, Minn., ten new sectional school buildings will be erected at a cost of \$50,000, providing housing facilities for 450 pupils. When these buildings are completed, full day sessions will be provided for at least 5,000 children who would otherwise attend school only a half day.

Lima, O., the interest rate on \$194,000 worth of school bonds voted on at the April primaries was raised from 5½ per cent to 6 per cent, it being found impossible to sell the bonds at the 5½ per cent rate.

County school superintendents of Indiana who favor the county unit system of public school control have encountered an obstacle in carrying

on the campaign for legislation to set up the system, it is said.

Some township trustees, whose offices practically would be abolished by the system, at least so far as school control by trustees obtains, are reported to be opposing the county unit proposal.

The superintendents face the inadvisability of doing anything to oppose the trustees when the legislature gets to work on school legislation after the first of next year, because every county school superintendent in Indiana is to face an election next June.

School trustees will meet in June, 1921, to elect a county superintendent and as one county superintendent has put it: "The county superintendent who wishes to hold his job will be in a fine fix then if he has worked contrary to the wishes of the trustees."

The State County Superintendents' Association, at its annual meeting at Bloomington recently, went on record as favoring the county unit system.

The attitude of the association is reported to have aroused the State Township Trustees' Association and the trustees' association has arranged for a secret session when it meets in Indianapolis October 18-20.

The situation is causing some concern in circles wishing to stir up the Hoosier public to a realization that Indiana must have better schools, for it is feared that "this club over the heads of the county superintendents" may prevent their active participation in some of the educational propaganda work.

Persons who favor the county unit system assert that township schools should be controlled more by a school expert than by an ordinary township citizen active in politics.

Under the county unit system it is proposed to create a county board of education somewhat similar to a city board of school commissioners and run the schools principally by an expert school superintendent with the support, and under the direction of a board, constituted of persons interested in education.

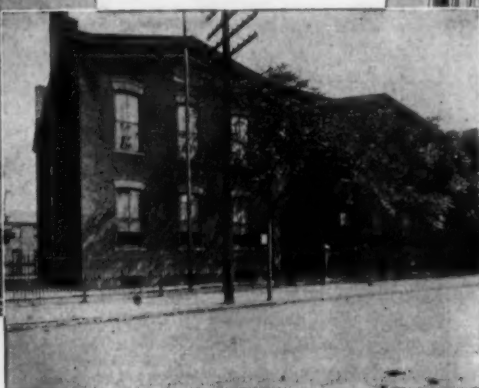
One argument for the system is that township schools thus would be under a schoolman and not under a township trustee whose duties are





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Should fire break out in one of your schools today, would the children be protected? Would the fire be held to the point of origin, by fireproof walls, floors and ceilings backed with doors and trim that will not burn? If we are going to protect the lives of the children, we cannot take a chance against fire. Proof of this has been shown in the Collinwood and Masten Park school fires.

Most schools are now built with fire protection in view. The walls, floors and ceilings are fireproof. Latest methods are used, but when it comes to the doors, frames and other interior trim, wood is chosen. When

a fire gets started in a building such as this, you can imagine how fireproof it is. It acts like a stove.

Where the building is fireproof and metal doors and trim are used, a fire may start, but it CANNOT get beyond its point of origin. The children in other parts of the building will be safe and even tho the fire may not be put out, it will die for lack of food.

Dahlstrom Hollow Metal Doors and Interior Trim DO complete the fireproof school. They are also sanitary, artistic and afford the lowest upkeep costs obtainable. Finish does not rub off, chip or crack.

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divided between the township schools, township roads, looking after the poor, settling live stock claims and the numerous other duties of a trustee.

Efforts to establish vocational agricultural work in the rural schools of Wabash, Indiana, have been discontinued on account of insufficient money in one township and the refusal of Purdue University authorities to approve the teachers selected in two other townships.

Some time ago the officers and directors passed resolutions pointing out that rural children were leaving for cities as soon as they were out of school and recommended that agricultural work be made a part of the school work in this county, expecting that the work would be interesting enough to keep the pupils on the farm after their school work was ended. George Ogden, trustee of Pleasant township; Frank Truss of Waltz township, and L. D. Wright of Chester township, planned to start the classes in the schools this fall. Mr. Ogden was forced to drop his plans on account of insufficient school money, and the other trustees had to drop their plans when Purdue refused to approve the teachers chosen for the work by the trustees.

L. N. Hines, state superintendent of public instruction of Indiana, has announced that a decided reduction will be made in the salary of the state director of vocational education when a successor is appointed for J. G. Collicott, recently appointed superintendent of the Columbus, O., schools. The present salary is \$6,000 a year. Mr. Hines said that at a conference recently it had been definitely decided to reduce the salary. He did not disclose the exact amount determined on but said that it would not be more than \$5,000 a year, and probably less. The state superintendent of public instruction, who is the head of the entire school system and appoints the vocational director, subject to the approval of the state board of education, receives a salary of \$5,000 a year. It has been urged for some time that the salary of the vocational head should not exceed that of the superintendent.

The announcement of Mr. Hines that the salary of the position has been lowered is expected to reduce the number of applicants for the directorship.

C. W. Burton was appointed inspector of buildings and grounds at a special meeting of the school board of Indianapolis the night of September 7. The appointment was made after an extended discussion of the duties of the office. Two commissioners expressed their belief that a building inspector who is to have charge of \$6,000,000 in new buildings that the school city plans, should be an engineer or contractor.

### INDIANA EDUCATIONAL CAMPAIGN.

A state-wide campaign in the interest of education will be held in Indiana for ten days beginning Nov. 7. The decision to conduct the drive for better schools was reached at a conference of leading educators called by L. N. Hines, state superintendent of public instruction, which met in Indianapolis August 16. The object of the campaign is to arouse the citizens of the state to a realization that Indiana no longer leads in education as in the past. The recent Russell Sage Foundation report ranked Indiana seventeenth among the states in educational efficiency and leaders of the new drive are determined to take immediate steps to improve the rating of the state. Special legislation needed to improve the efficiency of the Indiana public school system will be advocated thruout the state in the hope that the next session of the legislature will enact progressive school laws. The importance of the campaign was emphasized by Mr. Hines in an address opening the conference.

"This group has been called together," said Mr. Hines, "for the purpose of considering in an informal way the advisability of holding a state-wide campaign for the betterment of Indiana schools sometime previous to the meeting of the Indiana legislature in January, 1921. Indiana, according to very careful investigation, made recently by the Russell Sage Foundation stands seventeenth among the states as to the efficiency of its school system. We are not satisfied with that standing. We do not have any fault to find with the accuracy of the investigation nor with the justice of its conclusions. The point that concerns us most, as loyal Hoosiers, is to get Indiana out of the seventeenth place. You have been invited here to consider ways and means of improving our rank as a state, educationally."

"Many things need yet to be done to our rural schools. The efficient and up-to-date rural school will help prevent the drift, from the rural district to the cities. For the first time in the history of the United States the census will show that the majority of the people in the United States are in the cities. If people are to be held in the country they must have as good a chance to educate their children as they would have in the cities. As a consequence, we need to pay attention to the curriculum of the rural schools as well as to the closer supervision of the rural school work and the standardization of the rural school generally. There needs also to be a general building up of the rural community spirit. To all of these matters the people in the state of Indiana must address themselves in a very effective and decisive fashion. We ask your help and of all the people in the state to give the rural child a fair chance in education."

### New Hampshire's School Needs.

Awakened by the report made by the Russell Sage Foundation in which New Hampshire receives a low rating, the Tribune of Providence, R. I., has dug out the recommendations made several years ago by the school authorities of the state, urging their fulfillment. They are the following:

"For adequate support of public schools there is need of better methods of insuring sufficient school revenues in cities, and of some equalization of taxation among towns and cities to promote equality of educational opportunity."

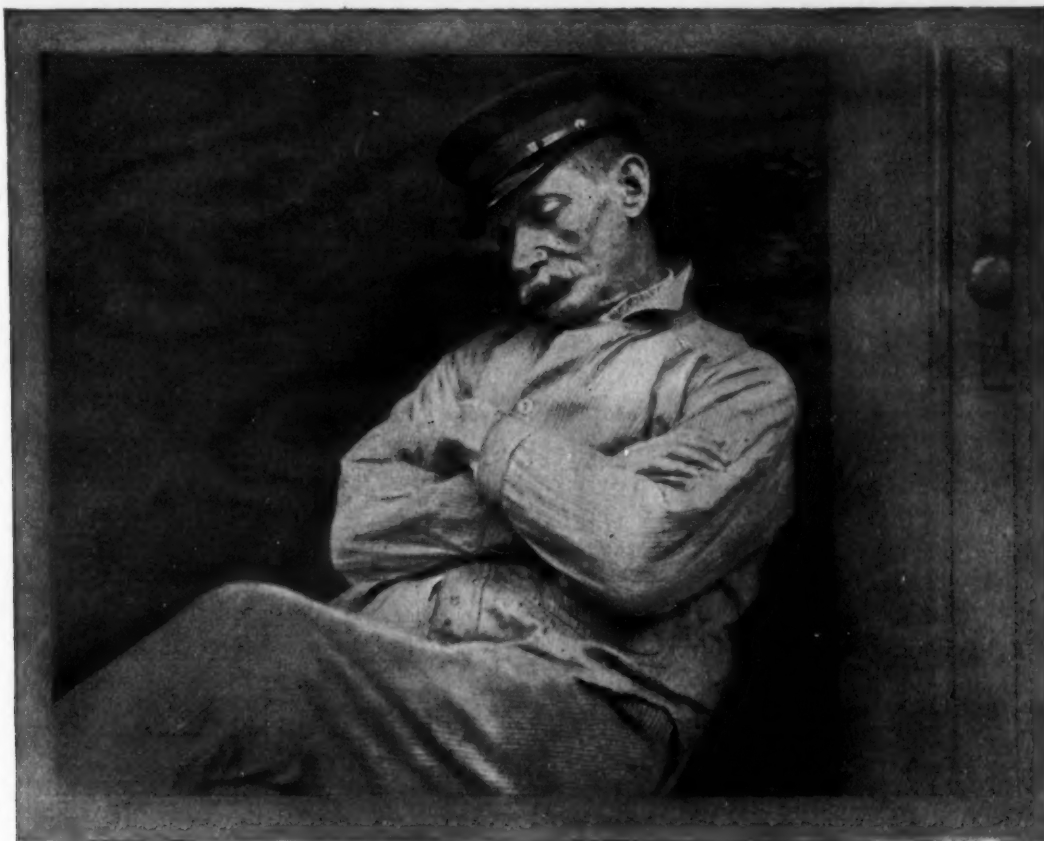
1. "A five-year program for new construction in towns and cities, with a view of providing adequate accommodations for an increasing school population."

2. "Higher standards of educational requirements for age and employment certificates, and requiring all minors in employment to hold such certificates."

3. "Fixing the compulsory attendance ages more positively."

4. "Legislative inquiry of school finance to insure sufficient revenue and equalize taxation and educational advantages among towns and cities."

5. "Legislative investigation of the observance or employment of school laws, and means to secure more uniform administration."



## Would you blame the janitor ?

**T**HEY blamed the janitor because the little children were burned to death in the grammar school fire.

All night before he had watched at the bedside of his sick wife. Wasn't it human that he should doze before the warm furnace for a few minutes?

It is easy to blame the poor janitor, but who shall be blamed for the seven school fires that start every day in the year? The school fires that cost many lives and \$4,000,000 a year?

The way to make schools safe for children is to put safety beyond human failure—make it mechanical and automatic.

A sprinkler system does just that. Acting on scientific laws as solid as the law of gravity, a

sprinkler system automatically puts water right on the heart of a fire when it is starting.

A sprinkler system never sleeps. Never quits the job! It is there year in and year out—morning and night—always and forever it watches. And when the fire starts the water starts. Make safety certain. Put a Grinnell Automatic Sprinkler System in your school.

We have prepared a book which shows the danger of school fires. It is "Fire Tragedies and Their Remedy." If you are a wide-awake citizen, it will answer convincingly every question you ask about the Grinnell Automatic Sprinkler. If you are doubtful as to the need of such protection it is just the book to prove to you why this particular apparatus is not a fad but a safeguard, come to stay. It talks to you when you have time to listen. Write us today for your free copy. Address the Grinnell Company, Incorporated, 291 West Exchange Street, Providence, R. I.

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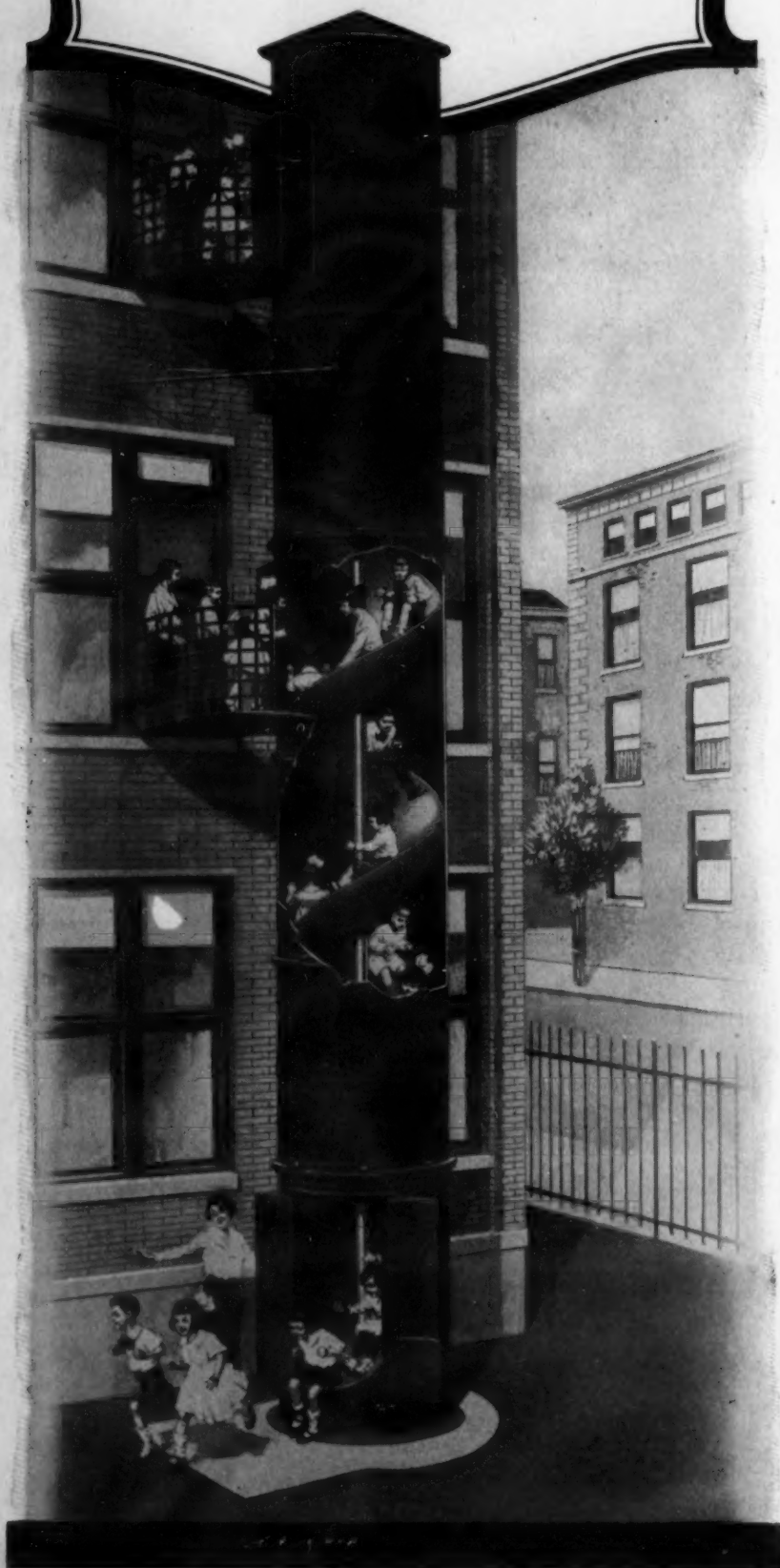


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**T**HE school building had been equipped with step fire escapes and an automatic alarm system. Drills had been carried on regularly, so frequently, in fact, that they had become monotonous. Still—

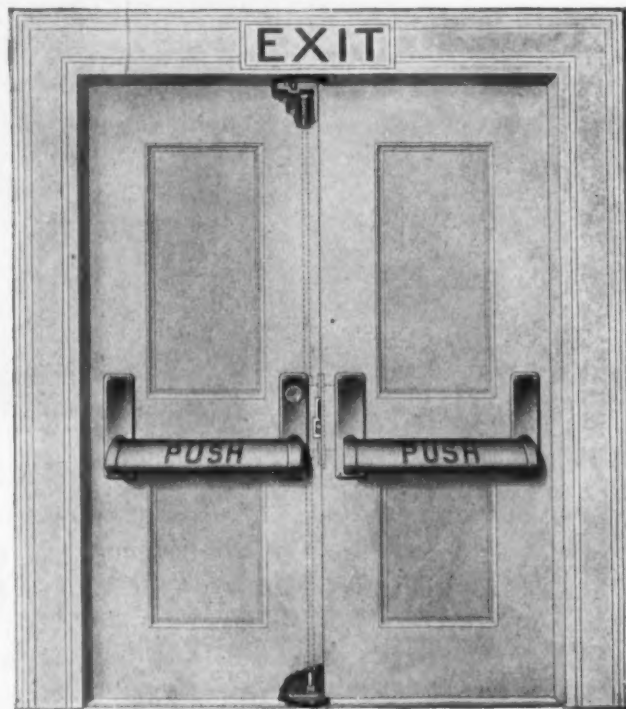
"... Fire broke out in the basement and gained so rapidly that the children were literally trapped. The step fire escapes proved to be a delusion and a snare. Children and teachers, too weak to go farther, dropped exhausted on the step fire escape and met a pitiful death—".

The Kirker-Bender Spiral Slide Fire-Escape would have saved them all. There is no stumbling nor falling. Everybody slides to safety. Safeguard the lives of those who entrust themselves to you. Dow Wire and Iron Works, Incorporated, Louisville, Kentucky.



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Members of school boards and other officials on whom the responsibility rests should make full provision for protection to life in case of panic by the use of this safety device.



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They have a wide push bar which projects only  $2\frac{1}{2}$  inches from the surface of the door, permitting the door to swing wide open so as not to obstruct passage through the doorway. Slight pressure on the bar at any point will release the bolts instantly. All edges and corners on the bars and brackets are carefully rounded, eliminating all possibility of wearing apparel becoming accidentally caught.

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# The New Continental Scale

## —Especially Adapted for Rural Schools

The New Continental Scale illustrated here, is especially adapted for rural schools where a portable scale is necessary. Due to its size and weight it can be moved about conveniently from place to place, the well-known Continental lever check preventing it from getting out of adjustment.

This new Continental Scale is ideal for rural schools and is desirable because of its dependability for accuracy. It has sufficient capacity on the beam without using any loose weights to take in most school children. By using only one extra weight the capacity is increased to 210 lbs., which is more than sufficient for all ordinary weighing. Its mechanism is absolutely positive and unfailing, yet strong and durable.

Can be fitted with detachable measuring rod 39" to 78"  
and also auxiliary measuring rod 24" to 40" if desired.

Ask your dealer or write direct  
for further particulars.



Model No. 526

### CONTINENTAL SCALE WORKS

3905-11 Langley Avenue

Chicago, Illinois.

## TEACHERS' SALARIES

### THE MORGANTOWN SCHEDULE.

The school board of Morgantown, W. Va., has adopted a revised salary schedule for the teachers in the school system. It is provided that new teachers shall be graduates of a high school and of a two-year normal school and shall present certificates of health. Teachers now in the service are not required to meet the latter condition. High school teachers must be graduates of a college or university, with special training in the subject they are expected to teach.

Teachers are divided into four groups, Class A, Class B, Class C and Class D. Inexperienced teachers in Class A will be given \$90; teachers with one year's experience, \$95, and those with two years, \$100. After two years, teachers may be promoted to Class B, or dismissed from the service.

Inexperienced teachers in Class B will begin at \$110; teachers with one year's experience will receive \$115; teachers with two years' experience will be paid \$120, those with three years' experience, \$125, and those with four years' experience \$130.

Class C teachers, with four years' experience and one year in the first, fifth, sixth, seventh and eighth grades, will be paid \$135. Teachers with two years' experience in these grades will be paid \$140, and those with six years' experience, \$145.

Class D teachers will be composed of those with unusual training and experience who may be offered salaries in excess of those in Classes B and C.

Class A High school teachers, without experience, will begin at \$150 per month; those with one year's experience will receive \$155; those with one year's experience in high school will be paid \$160 and those with two years' experience, \$170.

Class B teachers, with three years' experience, will be paid \$180 per month; those with four years, \$190; those with five years, \$200; those with six years, \$210, and those with seven years, \$220.

Class C teachers will be placed upon the same conditions as those in Class A and Class B, but will be given \$10 per month more than those in the latter classes.

Class D, heads of departments, will receive \$2,200 per year unless otherwise provided by the board.

Class E, assistants in gymnastics, home economics and manual training, will be rated as seventh and eighth grade teachers, or as regular high school instructors, according to experience and training.

One week sick leave is granted teachers each year, or a proportionate period of leave for less than nine months, without any loss of salary provided the illness is personal. Absence from duty for any other reason will result in a reduction in salary.

Principals of six, seven and eight-room buildings will be paid a minimum of \$1,500 and a maximum of \$1,700; those in charge of larger elementary buildings will be given a maximum of \$2,100, and those in charge of Junior High schools, \$2,200.

### TEACHERS' SALARIES.

El Centro, Calif. The board of supervisors of Imperial county has adopted a resolution providing for a minimum salary of \$1,500 for every teacher in the county.

The attorney general of Indiana has rendered an opinion that the new teachers' minimum wage law does not apply to contracts with teachers made prior to the publication of the acts of the special session of the legislature. The special session acts will not be published until September

15th, and by that time all teachers will have been employed for the school year.

The attorney general points out that in cases where contracts have been negotiated before the minimum wage law goes into force, a new contract may be substituted after the act becomes effective if the contracting parties agree.

The school board of Detroit, Mich., has passed over the acting mayor's veto, the school payroll providing for bonuses of \$300 to teachers. The payroll will now go before the city controller, who is expected to refuse honoring it. Such refusal by the city authorities will carry the bonus question into the courts where it will be finally determined whether the board has a right to pay bonuses from the school funds.

A schedule of salaries for rural teachers has been adopted by the county boards of Cerro Gordo county, Ia. The salary is graduated from \$75 up, according to certificate experience, tenure of service in the school and summer term attendance. Under the new schedule teachers may receive as high as \$150 a month and a large number will receive from \$100 to \$125 a month.

The board of education at Utica, N. Y., has adopted a new salary schedule which gives every teacher an increase of \$300 a year. All teachers with eight or more years' experience will receive the new maximum salary, and those who have taught less than eight years will receive the new annual increase of \$75 a year.

Teachers at Dubuque, Ia., have been granted increases averaging from \$300 to \$400 a year, and based on a ten months' school year.

All teachers at Jeffersonville, Ind., have received increases of \$25 a month, with salaries ranging from \$100 to \$150 a month.

The school committee at Providence, R. I., has approved a new salary schedule giving increases to principals, assistant principals, heads of departments, teachers and janitors, which will mean an additional expense of \$500,000.

Teachers in the Fort Wayne, Ind., township have been given an increase which raises the salaries to \$6.25 a day. The highest salaries heretofore have been \$5 a day.

Green Bay, Wis., teachers have been given increases ranging from 34 to 44 per cent. Grade



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RIDGE STREET SCHOOL, NEWARK, N. J.

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school teachers will be advanced 44 per cent and high school teachers 34 per cent, the minimum pay for grade teachers being \$1,200 and for high school teachers \$1,500. The total increase will be \$50,370.

All teachers at Binghamton, N. Y., have been given increases of \$300 a year. The superintendent has been raised from \$4,500 to \$7,500.

The county board of education of Bartholomew county, Indiana, has ruled that teachers who receive salaries of less than \$800 shall be paid the minimum fixed by the state law, regardless of the amount called for in the contract. Under the new state law, no teacher may receive less than \$800 for a year's service.

Sioux City, Ia. The Teachers' Club in a recent investigation of teachers' living conditions, has discovered the fact that teachers are paying exorbitant rates for rooms, some paying as high as \$45 a month for rooms worth about \$15. It was pointed out that increases in room and board followed close on the heels of the increases in salary so that the teachers are at present no better off than before.

The Teachers' Club has undertaken a campaign to interest the women of the city in the welfare of the teachers, to the end that housewives who have rooms to rent will charge no more than a fair profit, and that those who have rooms and have never rented them, may be induced to make an exception for the teachers.

St. Paul, Minn. The St. Paul Federation of Women Teachers has accepted the increases of \$200 for the school year in the belief that the increase is the best that could be obtained with the present funds. Teachers who have reached the maximum salary and are not entitled to the automatic increase of \$50 a year, will receive the actual increase of \$150 under the schedule, just half the increase which had been requested. The increases include the automatic raises of \$50 and are subject to a deduction of \$50 for the two months' vacation.

Sacramento, Calif. The board has adopted a revised schedule of salaries, under which teachers will receive average increases of \$40 a month, depending on the experience and length of service of the individual teacher.

At Monroe, La., the board of education has approved an increase for teachers of both white and colored schools in excess of \$10,000, which is almost 30 per cent.

New York City school teachers are to be denied the increased pay due them in August under the Lockwood-Donohue law, due to a temporary lack of funds. The inability of the city finance department to pay the increases has proven a still further embarrassment to the teachers because of the holding up of the entire payroll until the individual payments are reduced to the salary basis in effect previous to the new law. The monthly payroll of the schools amounts to more than \$5,000,000.

The United Township High School District of East Moline, Ill., has adopted a teachers' salary schedule which provides for a minimum of \$1,200 as against \$900 last year, and a maximum of \$1,450 as against \$1,080.

The teachers of Norwalk, Conn., want a salary increase instead of a bonus, and threaten to strike if their demand is not granted.

### ADMINISTRATION NOTES.

#### Los Angeles School Census Shows Growth.

Thirteen thousand increase in county since last year's report.

An increase of 13,197 in the daily average attendance at the schools of the county is shown by comparison of the school census figures for 1919 and 1920, filed with the board of supervisors by Mark Keppel, county superintendent of schools.

The detailed figures for each year are as follows:

Average daily attendance, year ending June 30, 1920, kindergarten, 7298; elementary, 95,267; high school, 23,366.

Average daily attendance, year ending June 30, 1919, kindergarten, 6,891; elementary, 85,479; high school, 20,364.

#### Times Have Changed.

"The problem of schooling for children of the rural districts is a perplexing one," says the Monson, Mass., correspondent of the Springfield Republican. "In the old days when a teacher was secured from the village or a neighboring

town and was boarded in the district for a nominal sum; when the big boys worked summers on the farm and went to school winters; when the farmers broke out the roads after a snow storm, without waiting for instructions from the road commissioner; when all grades from the 'a, b, c' to the ninth were represented; when the schoolhouse was the community center, matters seemed to adjust themselves satisfactorily on the whole. Now all is changed. Thruout the vacation Superintendent Brick has been on the sharp lookout for teachers.

"In the past, the superintendent could have his pick from a large number of applicants. Now teachers' agencies have no rural teachers to recommend. Experienced teachers simply decline to take these schools and inexperienced ones will not take them if they can secure others."

#### PARENT-TEACHERS' ASSOCIATION.

The Parent-Teachers' Association of Rochdale, Worcester, Mass., has employed a dentist to look after the teeth of the school children. The sum of \$300 has been invested in dental equipment.

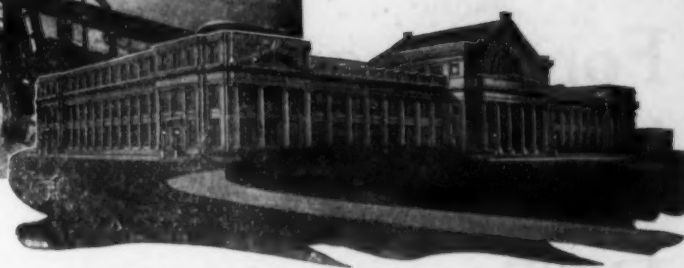
The Parent-Teachers' Association of Waltham, Mass., seeks the installation of a movie outfit in one of the schools. The investment involves \$1,200 and \$5 for each showing of pictures.

"No child should be permitted to leave school at a premature age, until his parents have been seen and urged not to spoil the future of their young people," says the Newark, O., Advocate. "For children, whose parents really need the money, more effort should be made to find profitable employment for them while they attend school."

"If the children who have received work certificates, fail to make headway at school, it will be the duty of three special teachers to investigate the causes," says Dr. Louis Nusbaum, associate superintendent of the Philadelphia schools. "We may be able to find that the children are working too hard, that they do work at home in addition to their paid labor, or that they are not having the proper time for recreation or evening occupation. In this way we will be able to bring the education, the work, and the home life of the child into harmony so that the child may receive the best possible benefit from all three."



Lunch Room, Nicholas Senn High School, Chicago



## Why the School Lunch Room?

The objective of the school is to fit the pupil for the business of living. No child that is undernourished is properly fitted to take his place in modern society. Cold lunches at noontime do not furnish the proper nutrition for the afternoon session. Then, too, all children require food for growing. The fact that the majority of school children are improperly fed is borne out by the marked improvement in the scholarship in schools that have installed lunch rooms.

The school lunch room does not necessarily entail a large investment, and can be made to pay all expenses and still furnish hot dishes to students at a remarkably low price. Often a five cent bowl of soup is an adequate supplement to the lunch carried by the pupil. In many schools the domestic science classes prepare part of dishes for the lunch room. Here it is possible to make a saving of the cost of the materials for the domestic science rooms. Courses in this manner are rendered much more practical as the students are not forced to work with abnormally small quantities because of the high cost of materials.

We invite consultation in the planning of school lunch rooms and domestic science departments. This will incur no obligation on your part. Our service includes the designing, complete outfitting and installation of these establishments. Many of the finest school cafeterias in the country are the products of our service organization.

### OTHER SCHOOL LUNCH ROOMS WE HAVE FURNISHED

Carter Harrison High School	Chicago, Ill.
Mississippi Woman's College	Hattiesburg, Miss.
Moline High School	Moline, Ill.
Harrisburg High School	Harrisburg, Pa.
Nicholas Senn High School	Chicago, Ill.
Valparaiso University	Valparaiso, Ind.
Nebraska State Normal School	Peru, Neb.
Sam Houston Normal Institute	Huntsville, Texas
South Dakota State College	Brookings, S. D.
State Teachers' College	Greeley, Colo.
Millsap's College	Jackson, Miss.
Academy High School	Erie, Pa.
Sapulpa High School	Sapulpa, Okla.
Iowa State College	Ames, Iowa
Muskegon Commercial College	Muskegon, Mich.
Lake View High School	Chicago, Ill.

We have prepared several books and bulletins which will interest you. These will be sent to you at your request. To avoid error kindly mention the books by number.

Y10—Equipment for Cafeterias, Lunch Rooms, Restaurants and Dining Rooms.

Y151—Feeding the School Child.

Y152—Practical Domestic Science in City and Country Schools.

Y21—General Catalog of Furnishing, Equipment and Supplies.

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The playground that has a Merry-go-round is always the most popular. And you can easily tell where that Merry-go-round is by the crowd of eager boys and girls clamoring for their turn to ride on it!

The Merry-go-round is safe—for it is strongly and sturdily built to stay firm on the ground. No danger of upsetting! And riding on the Merry-go-round is good healthful exercise—it develops muscles.

The Merry-go-round comes in two sizes—two seats and four seats. And the prices are remarkably reasonable.

*Write for particulars*

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Leaky school house windows and doors not only waste from 20% to 40% of the coal burned, but they DEFEAT scientific ventilation—and endanger the health of the school children.

Carbon-dioxide—the exhalation from the lungs—is a gas heavier than air. It sinks to the bottom of the room, forming a poisonous stratum for the seated children to breathe.

Forced or induced draft ventilation is only fully effective in expelling this poisonous gas when all the air in the room is warm.

*Athey*

### Cloth Lined Metal Weather Strip

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Weather Strip.

Keeps cold air out and warm air in.

It completely seals every window against cold air, dust and soot.

Yet, the windows open and close easily—and they cannot rattle.

Only Weather Strip that gives cloth-against-metal contact.

Only strip that is fully self-adjusting to compensate for swelling and shrinking of wooden frames and sash.

Only system that completely shuts out cold air at top, sides, and bottom of window and at joint between upper and lower sashes.

Equally effective for French windows, doors, hinged sash—for all openings.

Two or three years' coal-saving bill will pay the cost of the Athey equipment. After that you get 30% to 50% dividends for an indefinite number of years, as Athey Strips last as long as the building.

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*Illustration below shows one of the Asbesto-Crete School Houses.*



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We call attention particularly to the Asbesto-Crete two room school house which is much cheaper than an ordinary brick or stone structure, requires no repairs and is absolutely fire-proof.

The plans have been approved by many state boards and city authorities.

Ambler Asbestos building products are specified in all Asbesto-Crete buildings.

*Write for further information*

### Asbesto-Crete Buildings Company

1927 Market Street, Philadelphia

#### HYGIENE AND SANITATION.

Charlotte, N. C. The board has employed three school nurses for the next year, an increase of two over last year. It is planned to have all children at the beginning of the term examined for defects of the eye, ear, nose and throat and for evidences of contagious disease.

South Hadley, Mass. An appropriation of \$500 has been made for medical inspection in the schools.

Requirements for bubbling fountains, in which certain definite types are suggested, are contained in the recent regulations of the Wisconsin state board of health. The state board has directed that the line be sharply drawn between those which are unsafe and those which are strictly sanitary in construction and use. It is pointed out that many of the fountains in general use are so constructed as to bring the lips in contact with the fountain head. In other cases, the water becomes stagnant in the bubbler head, or the bowl retains water in such a way that the individual drinks from water furnished to others.

The board recommends as prime requisites in a fountain, a type of bubbler which delivers the water at an angle of the user, sufficient pressure to maintain a good volume of water and a column high enough to keep the bulb covered.

Kewanee, Ill. A series of free dental clinics will be conducted in the high school building during the coming season. All of the local dentists have cooperated in the work which will be free to the schools.

Philadelphia, Pa. The abandonment of two buildings and the remodeling and reorganization of eight others, have been ordered by the board of education as a result of a survey conducted last year by Dr. C. Lincoln Furbush. The survey revealed that ten buildings were dangerous to health because of overcrowding and insanitary conditions within the buildings.

To overcome the danger of overcrowding, it is planned to reduce the size of classes and to place some of the children on part-time. The total number of classes involved is 78, with an attendance of 3,200 children. Placing the children on part-time leaves only 1,000 to be affected.

Dr. C. F. Kendall, district health officer for York and Cumberland counties, has recommended that the city of Biddeford, Me., immediately appoint a school physician and nurse in order that a modern system of inspection of school children may be maintained under the direction of the school board.

Systematic movements on the part of schools and hospitals in Sanford, Me., have been started, to help underweight and defective children attain better physical form. Parents are urged to have their children weighed frequently and sent to classes where they can be shown how to improve their condition.

The dental clinic at Newburyport, Mass., has been reopened for the school year. All parents were requested to see that the children make appointments for dental work.

Mr. John D. Cassell, superintendent of buildings of the Philadelphia board of education, has issued a report on the survey of the school buildings. The report shows that 35 of the 345 buildings are unfit for use, twenty grammar schools are affected by dry rot and 20 per cent are out of date and do not meet the requirements of the law in lighting, corridor space and provision for exits.

The condition, in the opinion of Mr. Cassell, is due partly to the fact that the school system was founded more than one hundred years ago and some of the buildings are almost as old as the school system. The Keystone building, now occupied as an administration building, was erected 53 years ago. There is a need for a large building fund with which to provide better and more adequate buildings so that it will not be necessary to continue the use of these antiquated structures. It would cost \$30,000,000 to make all the school buildings fireproof.

Fifty children, physically unfit for regular school work, have been registered in the Michael Angelo and Buena Vista open window rooms, conducted by the San Francisco Association for the Study and Prevention of Tuberculosis.

The school department has fitted the rooms with shower baths and the society provides hot luncheons for the children. All of last year's children have been returned to their regular schools and as soon as any child improves suffi-

ciently to carry on the regular school work and stand the ordinary school routine he is transferred.

Special teachers are provided for these open window schools and only such work as a child can do without injury to his health is given. When a child becomes too ill to do even this work the association sends him to Hill Farm for recuperation.

#### AMONG SUPERINTENDENTS.

The Philadelphia schools opened with 250,000 pupils. Single sessions were held until September 15th, after which the regular two sessions went into force.

Miss Loraine Wooster, state superintendent, reports that Kansas has a surplus of teachers.

At Bellows Falls, Vt., the citizens voted against the one session plan for the high schools.

Boston opened the fall term with 112,000 pupils and with a complete set of teachers. The shortage of buildings will be met by portable schools.

Sidelights in connection with operation of the public school system, show the following:

It takes 86,400 pen points, 57,600 pen holders and 1,700 gallons of ink each year to teach the future citizens of San Francisco to write. Pupils in the upper grades use 72,000 lead pencils during this period, while the little tots "get by" with a paltry 14,400 big, fat pencils, which are easy to grip.

Writing sums, diagrams and the like on school blackboards necessitates 12,500 boxes of chalk, each box containing 144 sticks, while 1,250 erasers are worn out each school year in wiping out the laboriously inscribed "examples" and sentences.

The Boston finance commission has asked Mayor Peters to conduct an investigation of the business affairs of the public school system and to make the results public. The request follows a report of the finance commission on the purchase of school pianos from a Boston firm thru the offices of John A. O'Shea, director of music. The charge includes statements to the effect that the school board believes in retaining unfit persons in the school system, believes in shielding persons charged with offenses and has violated its obvious duty.



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The building needs of the schools of Dallas, Tex., will be met during the coming year thru the proceeds of a bond sale made after the board had voted \$1,500,000 for building purposes. The bond sale will bring a total of about \$1,350,000 after expenses of the issue are paid.

Newport News, Va. The school system will operate this year on an appropriation of \$220,000, which is the largest ever provided for school purposes in the history of the city. In addition to the city appropriation, there will be a state appropriation of approximately \$36,000.

The proceeds of a bond issue amounting to more than \$400,000 will be used to erect a number of new elementary schools.

Minneapolis, Minn. The city authorities have been compelled to reduce the amount of appropriations to the several departments by approximately \$2,000,000 in order to meet all necessary needs. The school and park boards will receive \$11,117,500, or about \$1,500,000 less than the total request of these departments. The board of education had asked for \$600,000 more than the maximum rate provided, according to the city statistician, and the figures do not include permanent improvements such as new schools, but only general expenses which make up the bulk of the budget request.

New York, N. Y. The board of education has asked for \$44,075,327 for new buildings, playgrounds and other improvements during the year 1921. Twenty new schools are provided for, of which two will be in Manhattan, six in the Bronx, ten in Brooklyn and two in Queens Borough. It is planned to remodel and adapt a college building and a church building to school purposes.

Cedar Rapids, Ia. The janitors have asked the board for an increase in pay of 20 per cent over their last year's salary. The increase is demanded because of the inability to meet the cost of living and the long hours which must be spent in school work.

The New York City schools recorded during the past summer the largest enrollment in vacation opportunity classes since this type of classes has been established. In the high schools, nearly two thousand were enrolled for making up back work or taking advanced courses. A large number of girls took positions as waitresses at Ocean

Grove under the supervision of the board of education. The girls enjoyed courses in domestic science and physical culture.

One of the busiest places in the city today is the old Lowell High school at 1520 Sutter street, where the board of education keeps supplies. Requisitions from teachers in the various schools come here and are filled in accordance with a carefully worked out system. During the last school year, according to Frank Conklin, who is in charge of all supplies, but one error was made in filling 5,000 orders.

Requisitions for school supplies of whatsoever character first come to the attention of Miss S. J. Jones, the chairman of the supplies committee, whose duty it is to see that no school gets more than its fair allotment. Nothing leaves the storehouse except upon requisition. In addition to ordinary supplies, the storehouse also keeps on hand the necessary brooms, mops, dusters, curtains, clocks and other educational adjuncts.

The Indiana State Board of Education has adopted a rule providing that late entrance in teacher training courses in teacher training schools shall be counted as an absence. Late entrance is to be excused only when made necessary by late closing of a school term where the entrant has been teaching. Students may not be absent more than ten days, the absence to be due only to late entrance or illness.

The State Insurance Commission of Maine recently held a hearing on the appeal of the Sanford school board to be released from an order of the local fire inspector requiring janitors to be present in school buildings while children are in attendance. The school board refused to comply with the order of the local authorities and appealed to the state commissioner for relief.

In defending his action, the local inspector argued that the fire fighting apparatus cannot be operated by women teachers.

The school officials of Howard County, Ind., have postponed the construction of four modern schools until business conditions have become more stable. The action became necessary because of such factors as prices of materials, labor supply and the condition of the money market.

Mr. John Oglesbee, for 17 years superintendent of buildings of the board of education at Piqua, O., died in May.

The results of the dental examination work among the school children of Worcester, Mass., have proven a great success. There are no children in these schools now with teeth uncared for. Great improvement in the physical condition, and aptitude and attention to studies, by the children have been noted by parents and teachers.

### MR. BLAIR APPOINTED.

Mr. John J. Blair of Wilmington, N. C., has been appointed as supervisor of the erection of all new public school buildings in the state of North Carolina.

In his new position, Mr. Blair will spend his full time in aiding counties, cities, towns and school districts in providing plans for modern school buildings. The service will be furnished free of charge to any community intending to erect a new school building. He will also have charge of the inspection of the school buildings in order to secure the erection of a better type of schools.

The new department has for its purpose the provision of better types of school buildings, to give aid and counsel in selecting school sites, in beautifying school grounds and in securing more attractive schoolrooms.

### MR. COLLICOTT TO COLUMBUS.

Jacob G. Collicott, director of vocational education under the Indiana state board of education, was elected August 16 superintendent of the Columbus, O., public schools. Mr. Collicott has been in public school work in Indianapolis since 1912, when he came from Tacoma, Washington, to accept the position of superintendent of the public schools.

He is a native of Greensburg, Ind., and was principal of the Evansville, Ind., high school until 1907, when he became principal of Stadium high school in Tacoma. In 1917 he was chosen director of vocational education, under the state board of education and has held the position until the present time. Mr. Collicott has been identified with movements for improving and enlarging the field of education in Indiana since he came in 1912. When a state vocational education law passed by the legislature in 1917, his unique position as leader in the movement for vocational education caused him to be elected to the position of state director in the work.

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The satisfactory service that Clow Madden patent closed tank water closets are giving in schools throughout the country is due to their reliability and their economy of operation and upkeep.

Many users have found that Clow Automatic upkeep costs figure in cents rather than in dollars.

Your architect or contractor knows about Clow Automatics.

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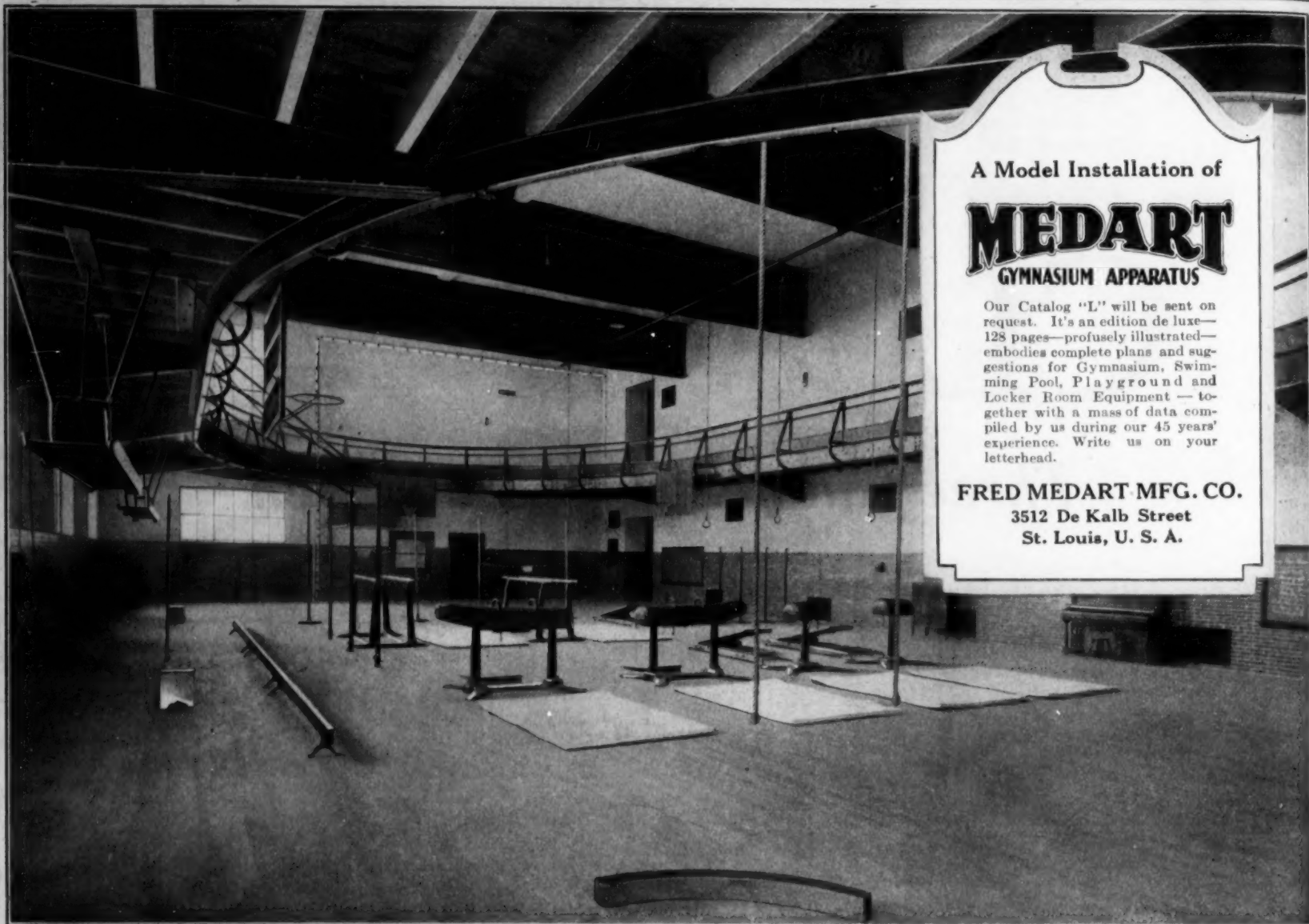
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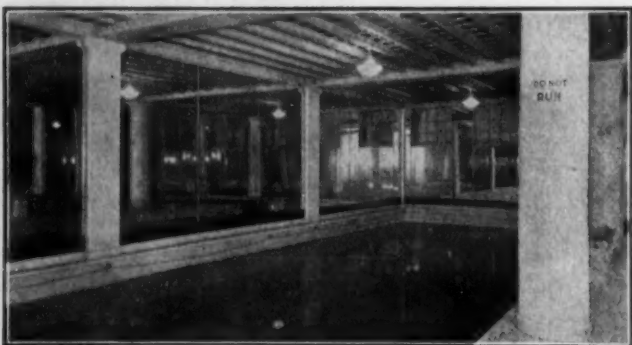
## MEDART

GYMNASIUM APPARATUS

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### R. U. V. Sterilization at The Carroll Club, New York

THE CARROLL CLUB, 120 Madison Ave., New York, is one of the leading girls' clubs of the city. Its beautiful swimming pool (illustrated above) is perfectly and continuously protected by R. U. V. (Ultra Violet Ray) Sterilization.

The purification of water for swimming pools by R. U. V. Sterilization is the most efficient known to science. Economical and automatic in operation—requiring no technical supervision or adjustment after installation. Employs no chemicals. Does not change taste, color or temperature of water.

The experience and recommendations of our expert Sanitary Engineers are at your service in designing modern sanitary swimming pools. Address Department "L", for full information.

**The R. U. V. Co., Inc.**  
165 Broadway New York City

## SHOWERS

WITH THE

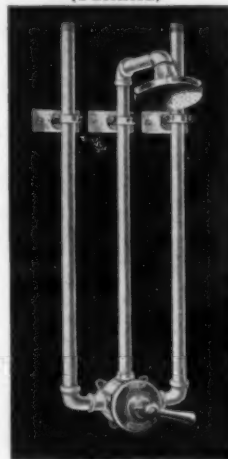
### INCOMPARABLE NIEDECKEN MIXER

(Patented)

SAFETY  
EFFICIENCY  
ECONOMY

Simplicity and ease of accessibility for repairs when necessary—which are seldom.

The Only Tool  
Required  
Is  
A SCREW-  
DRIVER



N. R. 150

ANTI-SCALD-  
ING  
PERFECT CON-  
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EVERLASTING

The valve seats are renewable and easily replaced.

Showers furnished for all requirements. Concealed or exposed type mixer.

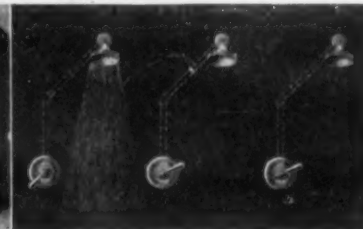
Shower heads are cast brass.

Economy Shower, made of 1/2" galvanized pipe, rough brass N. P. Mixer, cast brass shower head. Price, \$32.00 Piping not included.

Suggest finishing with white enamel paint or aluminum bronze after installing.



BOYS



BATTERY INSTALLATION



GIRLS

Write for Bulletin S. B. 15 X.

HOFFMANN & BILLINGS MFG. CO.,  
100 SECOND STREET. MILWAUKEE, WIS.



# A VALUABLE SUPPLEMENT TO YOUR FIRST AID EQUIPMENT

# FREE

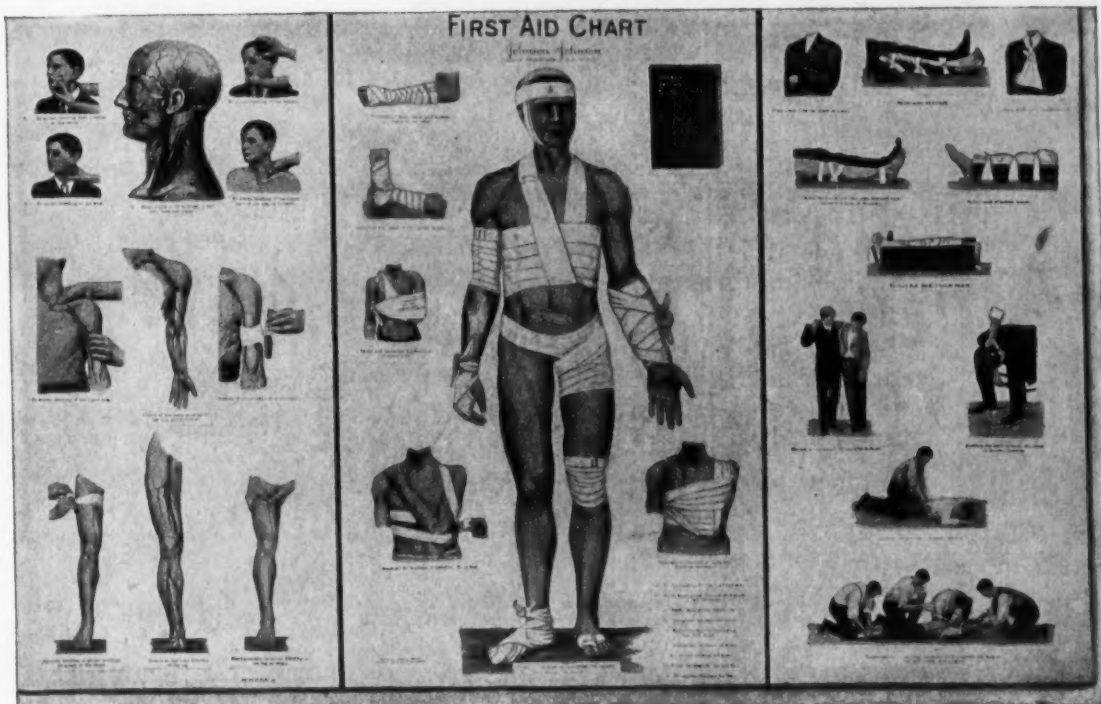
to any school that is now giving attention to instruction in first aid and which is equipped with first aid material.

This handsome chart will be given with our compliments to any Superintendent or Principal who writes us about the work that is being done in this important subject.

The Chart as shown in the illustration is an education in itself and will hold student-interest when they tire of pondering over books.

To schools that do not have first aid equipment a chart will be given with each purchase of Johnson's First Aid Cabinet, No. 1.

A complete working guide for first aid instruction



The Chart is 27 x 44 inches, lithographed in ten colors on heavy board. Folds for carrying. The back of the Chart contains full First Aid instruction in black and white.

**JOHNSON & JOHNSON**  
NEW BRUNSWICK, N. J.

## COUNTY UNIT OF ADMINISTRATION. The Number of States with the County Unit Increasing.

Twenty states now have the county-unit system of local school administration, according to data collected by the United States Bureau of Education. In two others the adoption of the county system is made optional with the several counties, and in three others some elements of the system have made their appearance. The following classification is made in the bureau:

County unit, strong form—Alabama, Delaware, Florida, Georgia (four counties), Kentucky, Louisiana, Maryland, New Mexico, North Carolina, Tennessee, and Utah.

County unit, weaker form—Arizona, Arkansas, California, Georgia (except in four counties), Mississippi, Ohio, South Carolina, Texas, Virginia and Washington.

County unit, optional—Montana and Nebraska (otherwise district system).

Township unit—Connecticut, Indiana, Maine, Massachusetts, New Hampshire, New Jersey, North Dakota, Pennsylvania, Rhode Island, Vermont and West Virginia.

Part of state district system, part township—Iowa, Michigan and South Dakota.

District unit—Colorado, Idaho, Illinois, Kansas, Minnesota, Missouri, Nevada, New York, Oklahoma, Oregon, Wisconsin and Wyoming.

In the states classified as having the county unit in "weaker form," the system is in reality a combination of the county and district systems; and in states having the "strong form," the district is in most cases left with some functions. Iowa, Oregon and Wisconsin have made beginnings with the county system. In this classification, West Virginia is placed under the head of township unit. As a matter of fact, the unit of administration in that state is the "magisterial district," which is similar in area to the "town" in New England or the township in Pennsylvania and other states having like units with irregular boundaries.

## SCHOOL ADMINISTRATION NOTES.

Dr. Abram Simon, president of the board of education at Washington, D. C., has adopted a

policy of fair play in the appointment of teachers. The new plan which eliminated favoritism and undue influence, is as follows:

Each teacher must be eligible for the position and must have a high school education and two years' training. The teacher must also pass the competitive examination with a grade of at least 70 per cent. In taking examinations, all teachers are numbered and appointments are made by number instead of by name. In the case of the high school teacher the method of appointment is identical but the qualifications are necessarily higher.

Lowell, Mass. The board has passed a rule providing that each child entering the elementary schools must be five years and three months old. The new age regulation is a result of the intention of the board to establish the junior high school this fall.

## ORGANIZATION AND CONTROL OF PARENT-TEACHER CLUBS

(Concluded from Page 54)

Organization once completed and in operation the activities of the association will form the next problem for solution. This is a splendid chance for astute leaders in school or out, to assert helpful influence and suggestion. The earlier meetings will be more or less formal and can be filled with entertaining features, as music, lectures, lantern talks, etc. These will serve as means of advertisement and can be made of real value. It need scarcely be said, however, that the great result of these early meetings will be the social commingling, the meeting of parent with parent, and with teacher, in short the socialization of the club.

The club can later take up more extended and more useful work. The committee can secure the help of experts in lines of interest to the community. Few localities lack men and women well worth hearing, that will not donate

an evening to such work as this. The line of appeal is almost limitless. Lectures on hygiene, on sanitation, on practical gardening are illustrations of what can be expected. A splendid part of such evenings is the informal discussion of the talk given. The community itself offers the club's best problems. The school and its work, the home and its relation to education, local improvements, are all suggestive of working material. The actual abatement of nuisances about home, school and town, and the substitution of sane improvements is not too much to be undertaken.

The usual tentative organization is made for one year. In order to insure the life of the club and a continuance of its usefulness, a constitution should be regularly made and adopted before the end of the year. This can be made very simple and brief. The essentials that are to be provided for are (1) name, (2) object, (3) membership, (4) officers and their election, (5) committees, (6) date and time of meetings, (7) programs, and (8) provision for amendment. The earlier such a constitution is in operation, the better for the club. The system introduced by it will prove helpful. This idea can be enlarged so as to include membership cards, program cards, and other aids that will suggest themselves to a live association.

With these general ideas for a guide, any progressive person or committee can create a teachers-parents club in any community. The club once created will easily become self-operative and self-supporting. Its good from a social estimate is immeasurably great. Its benefits to the community, in a practical way can be seen in any neighborhood that such a club exists in.



A SIGN OF QUALITY



A MARK OF SERVICE



CATALOG "A"—Agricultural Apparatus and Supplies particularly for Smith-Hughes schools, enlarged and revised in order to meet Smith-Hughes requirements. (190 pages.)

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SEND FOR CATALOG—Buy direct from Manufacturer for service and highest quality.

VOCATIONAL EDUCATION is receiving an ever increasing amount of attention and OUR CATALOGS show many designs of particularly vocational value—including many new designs as well as popular and proven forms.

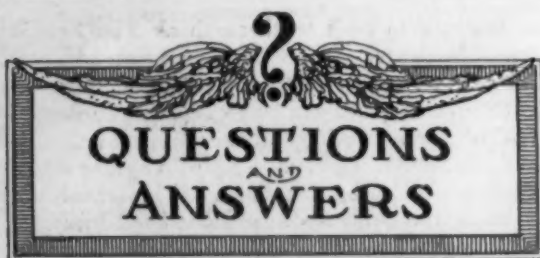
ASK FOR COPY OF ANY OF OUR CATALOGS—GIVING YOUR OFFICIAL POSITION AND NAME OF SCHOOL

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MANUFACTURERS, EXPORTERS AND IMPORTERS OF SCIENTIFIC APPARATUS AND SCHOOL SUPPLIES.

1516 ORLEANS STREET.

CHICAGO, ILLINOIS, U. S. A.



## Books on Heating and Ventilating.

65. Q.—Please furnish me with a list of books available on heating and ventilation, also price of each.—R. P. R.

## Heating in General.

A.—Allen's Notes on Heating and Ventilation, \$2.50, Domestic Engineering, Chicago; *Cyclopedia of Heating, Plumbing and Sanitation*, \$12.80, American School of Correspondence, Chicago; *Harrison's Applied Heating and Ventilation*, \$10.00, Heating and Ventilation School, Broadway, New York, N. Y.; *Heating and Ventilation*, \$1.50, American School of Correspondence, Chicago; *Johnson's Practical Instructor on Operating Heating Plants*, \$0.50, J. W. Johnson, St. Cloud, Minn.; *Schumann's Manual of Heating and Ventilation in Its Practical Application*, \$1.50, D. Van Nostrand Co., New York, N. Y.; *Barker's Theory and Practice of Heating and Ventilation*, \$8.00, D. Van Nostrand, New York, N. Y.; *Carpenter's Heating and Ventilating Buildings*, \$3.50, John Wiley & Sons, New York, N. Y.; *Report of the Chicago Commission on Ventilation*, 1915, 25 cents, Chicago Commission on Ventilation, Chicago; *Fuller's Designing Heating and Ventilating Systems*, \$2.00, David Williams Co., New York, N. Y.; *Greene's Elements of Heating and Ventilation*, \$2.50, John Wiley & Sons, New York, N. Y.; *Harding's and Willard's Mechanical Equipment of Buildings*, \$4.00, John Wiley & Sons, New York, N. Y.; *Hoffman's and Raber's Handbook for Heating and Ventilating Engineers*, \$3.50, McGraw-Hill Co., New York, N. Y.; *Hubbard's Heating and Ventilation*, \$1.50, American Technical Society, Chicago;

cago; *Kimball's Ventilation and Public Health*, \$0.25, American Academy of Medicine, Easton, Pa.

## School Heating and Ventilation.

All's Mechanical Equipment of School Buildings, \$2.50, Bruce Publishing Co., Milwaukee; *High School Buildings*, Vol. II, \$4.50, Bruce Publishing Co., Milwaukee; *Cook's Schoolhouse Sanitation*, Bulletin No. 21, 1915, 10 cents, U. S. Bureau of Education; *Ventilation Laws of the U. S.*, \$1.00, Heating and Ventilating Magazine, New York, N. Y.; *Sturtevant's Heating and Ventilation*, B. F. Sturtevant Co., Boston, Mass.; *Gerhard's Sanitation of Public Buildings*, \$1.50, John Wiley & Sons, New York, N. Y.; *Rules of the Minnesota State Department of Education Relating to School Buildings*, Bulletin No. 56, 1918, S. A. Challman, State Department of Education, St. Paul, Minn.; *Dresslar's School Hygiene*, Macmillan Co., New York, N. Y.; *Barry's Hygiene of the Schoolroom*, Silver, Burdett Co., New York; *School Buildings and Grounds*, 1917, University of State of New York, Albany, N. Y.; *Shaw's School Hygiene*, Macmillan Co., New York; *Smith's Short Course for Janitor-Engineers*, Bruce Publishing Co., Milwaukee; *Mills's American School Building Standards* (1915), Franklin Educational Publishing Co., Columbus, O.

## SWEEPING COMPOUND.

69. Q.—Will you please send instructions for making our own sweeping compound?—H. L. H.

A.—There are several patented compounds for sweeping. They are largely composed of sawdust and silicious material, together with some bonding medium, such as rosin, oil or tar. Bran and sand are also usual ingredients. The following is perhaps as good a formula as any. Melt 2 oz. of paraffine wax in 2 qt. of paraffine oil, over a water bath; then add 6 oz. of coarse salt, 5 lbs. of sea sand, 10 lbs. of sawdust, and finally add 1 oz. of oil of eucalyptus. It is impossible to see what the oil of eucalyptus is added for, except possibly to give a clean smell.

## PERSONAL NEWS.

Mr. Evan J. Lewis of Scranton, Pa., has been appointed superintendent of schools at Carbon-

dale, to succeed Mr. W. C. Greenwalt. Mr. Greenwalt has gone to Olean, N. Y.

Mr. J. W. Browning of Belvidere, Ill., has been appointed superintendent of schools at Jamestown, N. D.

Mr. W. C. Arterbury of Fairfield, Wash., has accepted the superintendency at Hillyard.

Mr. W. L. Brooker has been elected superintendent of schools at Asheville, N. C.

Dr. Ellsworth Lowry, principal of the Winona Minn., Normal school, has been named as district superintendent of schools of Indianapolis, in charge of normal school activities. Mr. Lowry is a graduate of the Indiana Normal school and has received degrees from Columbia University and from the University of Minnesota.

Supt. C. B. Ijams of Jackson, Tenn., has been re-elected for a two-year term.

Mr. Amos Henry has assumed his duties as superintendent of schools at Jeffersonville, Ky.

Mr. G. M. Crutsinger of Victoria, Tex., has accepted a professorship in the North Texas Normal school at Denton.

John W. Casto has started his third year as superintendent of the United Township high school district of East Moline, Illinois. He has more than doubled his equipment, enrollment, faculty and departments during the first two years. In addition to his school duties, he serves a wide variety of community interests.

Superintendent Hunt of the Norfolk, Va., schools has been granted an increase in salary of \$275 a month, which excludes maintenance of an automobile. The enrollment for last year was 9,200 of which 6,523 were white and 2,677 colored pupils. The teaching force numbered 229.

Mr. Byron H. Somers has been elected president and Mr. E. W. Cook, secretary, of the school board at Fort Wayne, Ind.

Mr. Clayton L. Erwin of Barton, Vt., has been elected to the superintendency in Rockingham and Westminster.

Mr. C. C. Hitchcock of Syracuse, N. Y., has been made superintendent of schools at St. Johnsbury, Vt.

Supt. John C. Gray of Chicopee, Mass., has resigned after a service of twenty years.



Modern Installation of  
**MEDART**  
 STEEL LOCKERS  
 in the Grover Cleveland High School  
 St. Louis, Mo.

Discriminating buyers choose Medart Steel Lockers on account of sturdy construction, superior design and beautiful finish. Illustrated catalog on request.

**FRED MEDART MFG. CO.**  
 Potomac and De Kalb Streets  
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Hackensack High School, Frank Eurich, Architect

The fresh, pure air delivered by the Peerless System is not only heated to the proper temperature, but by being passed over a body of water in each Unit is humidified to a suitable condition for breathing. This assures a supply of uniformly good quality air which is not possible if untreated air is brought into school rooms, particularly if the school is located in a congested or dusty district. Unless the pupils are supplied with a sufficient amount of pure air the result of their work is found to be far below standard. Not only are their assimilating faculties depreciated, but increased liability to actual physical ills become a menace. Lassitude, sluggishness, and headaches are the more common indications of poor and insufficient ventilation.

Our Engineering Staff is at your service.

**PEERLESS UNIT VENTILATION CO., INC.**  
 521 West 23rd Street, NEW YORK.

## LAPIDOLITH

TRADE MARK

### Makes Concrete Floors Dustproof and Wearproof

#### Dustless Concrete Floors!

Every concrete floor in your school building is a probable source of concrete dust.

This sharp, hard silicate harms clothing, desks and even the lungs of the pupils.

Lapidolith will make old or new concrete floors granite hard and therefore, dustless.

*Just flush it on!*

Lapidolith is a liquid chemical and it acts at once, completing the hydration of the cement and filling the pores with a crystalline material.

This treatment makes the floors in the toilet rooms non-absorbent, and so easily washed and without odor.

Leading colleges and schools use Lapidolith.

Write for their testimonials, also free sample and literature. Dept. 22.

**L. SONNEBORN SONS, INC.**  
 264 Pearl Street, New York

Also manufacturers of Cemcoat, the washable wall coating for schools



# A New Building?

In selecting or approving the plans of the architects for your new building remember that the heating and ventilating is after all the most important feature.

It is not only **IMPORTANT**, it is **VITAL**.

On the quality and efficiency of your heating and ventilating systems depend:

**First--The health of pupils and teachers.**

**Second--The development of the pupils, mentally and bodily.**

**Third--The efficiency of the teachers.**

**Fourth--The economy of your operating expenses.**

Coal is higher than ever before and every year it costs a little more.

No system of heating and ventilating is complete and adequate without automatic temperature regulation. *The Johnson System of Heat Control* is dependable. The Johnson Company offers the best grade of apparatus and the highest grade of service.



**Johnson Service Company**

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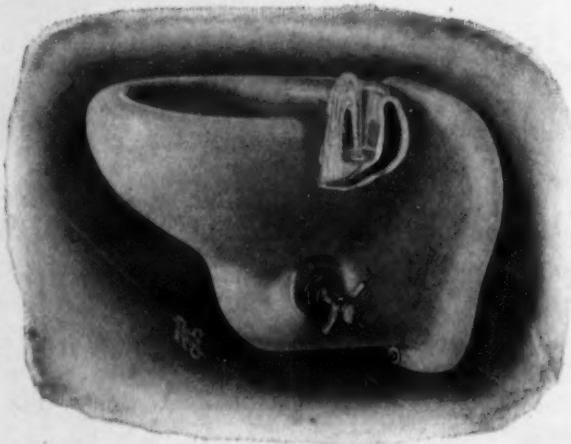
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Wisconsin

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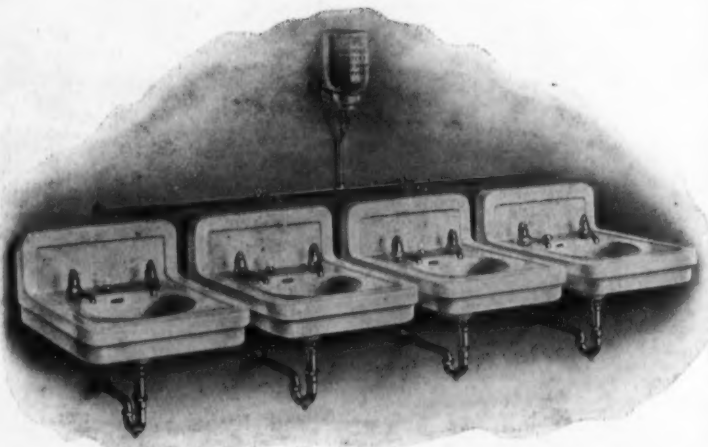
## Rundle-Spence "Vertico-Slant" Drinking Fountains

Write for a copy of our new 70 page catalogue. It illustrates our "Vertico-Slant" Drinking Fountains in detail.

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52 Second Street

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## Watrous Gravity Liquid Soap System

The lavatory, where baby hands come in common contact with a bar of dirty soap, is the breeding ground of children's diseases.

Make it sanitary with a Watrous System—which gives each child clean, pure soap.

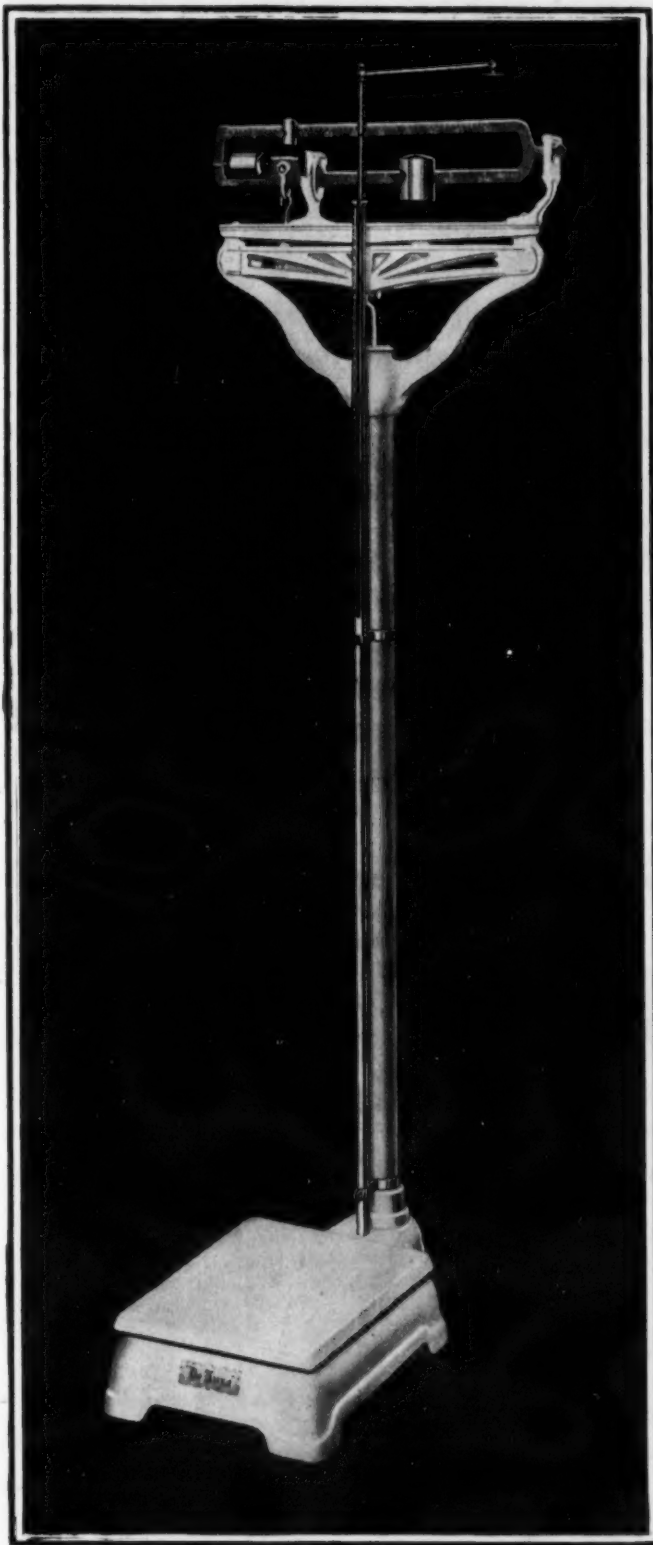
It's cheaper to operate, too. Can be installed without disturbing present plumbing. One central easy-to-fill container serves any number of bowls. No moving parts to get out of order.



Schools everywhere are installing Watrous Systems. Let us send you our illustrated catalog.

**The Imperial Brass Mfg. Co.**

1215 W. Harrison St., Chicago, Ill.



America's premier school scale, of special design and sturdy construction to endure the strenuous usage of the school room, with no loose weights and delicate adjustments. Beautifully finished in silver-gray or snow-white permanent enamel with heavily nicked trim. Capacity, 300 lbs., graduated in  $\frac{1}{4}$  lbs. Height, 58 inches. Floor space, 13 x 24 inches. Platform, 10 $\frac{1}{2}$  x 13 $\frac{1}{2}$  inches.

## Time Tested ACCURACY

Made by the Chicago Scale Company, America's pioneer scale builders, known for their reliable weighing machines since 1863, the De Luxe School Scale has established a record for accuracy which stands unparalleled in the history of our educational institutions. Three score years of test have demonstrated conclusively to leading school men the country over that De Luxe stands for the *utmost* in accuracy and dependable service.

A MASTER SCALE and measuring machine, designed and built by experts who for years made a careful study of school requirements, the De Luxe School Scale is a distinct achievement in scale engineering. So positive is the reliability and accuracy of the De Luxe that today it is accepted as standard equipment in America's most modern schools, hospitals and public institutions.

De Luxe quality is *known*—its performance during years of service have proven it. And today every De Luxe bears the unqualified guarantee of its pioneer manufacturers.

Details of the De Luxe School Scale will interest every Superintendent, Principal, Trustee and Teacher. Let us send complete information—there is no obligation.

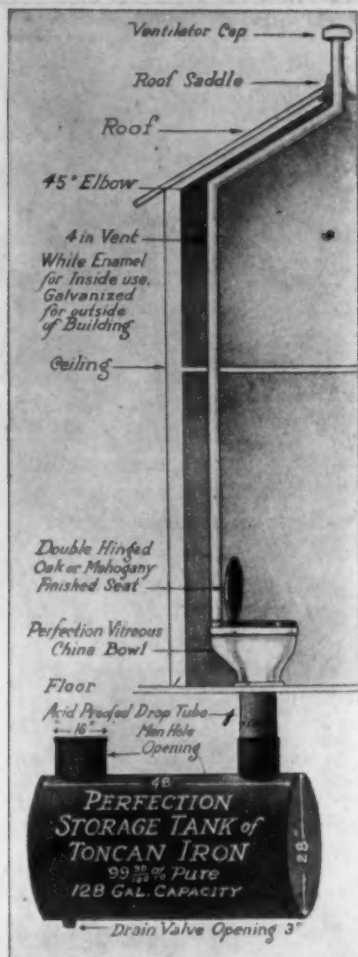
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Of particular importance to the school world is the improved full-capacity measuring device, an exclusive feature of the De Luxe. Marked in legible, easy-reading,  $\frac{1}{4}$ -inch graduations from 2 feet 6 inches to 6 feet 6 inches, the De Luxe will accurately and quickly measure the smallest child or tallest adult—a feature heretofore impossible with the old-fashioned measuring-rods.

Chicago Scale Co.  
ESTABLISHED 1863  
MASON, DAVIS & CO.  
(Grand Crossing) CHICAGO

SCHOOL *The De Luxe* SCALES  
U. S. STANDARD  
WITH MEASURING DEVICE





## Specify Equipment Which Safeguards Health

**D**O the specifications for that new school-house call for the latest and safest toilet facilities for the children of your community? Far more important than the flag-pole or even the athletic field are the sanitary indoor toilet rooms which protect the health and morals of the girls and boys.

**P**ERFECTION Chemical Toilets and Perfection Septic Systems provide rural districts with the same comforts and the same safe sanitation enjoyed by urban schools. Let us figure on your requirements.

## CHEMICAL TOILET CORPORATION

Desk A

Syracuse, N. Y.

### PERSONAL NEWS of SUPERINTENDENTS

Prof. Zenos E. Scott, newly elected superintendent of city schools, arrived in Louisville, Ky., from Trenton last week and immediately assumed the duties of his office. Mr. Scott is one of three brothers in adjoining counties who are school superintendents.

Mr. Jacob G. Collicott, State Supervisor of Vocational Education in Indiana, has become general manager of the Columbus schools.

Mr. Collicott is a native of Indiana and received his earlier education and his professional training in the Hoosier state. He began his teaching career as principal of schools at Alexandria, Ind., and served in several cities of the state. In 1904 he became principal of the high school at Tacoma, and his success as a leader led to his election in 1907 to the city superintendency. In 1912 the board of school commissioners at Indianapolis elected him superintendent. He continued in this office until 1917, when he resigned and accepted the office of director of vocational education.

The Omaha board of education has re-elected Superintendent J. H. Beyeridge for a term of three years, fixing his salary at \$10,000. Last year the board raised his salary from \$6,000 to \$7,500. During the past three years Mr. Beyeridge secured a school bond issue of \$1,000,000 in 1918 and a \$5,000,000 bond issue in 1919.

Mr. Wm. C. McGinness of Bellows Falls, Vt., has been elected superintendent of schools at Revere, Mass., to succeed G. E. Bemis, resigned.

Mr. H. H. Van Fleet of Great Bend, Kans., has been elected superintendent of schools at Monte Vista, Colo. In his new position, Mr. Van Fleet will work for two boards, a consolidated district board and a county high school board. The former has completed a modern junior high school, and the county will build a \$250,000 senior high school.

Mr. S. K. Clark, formerly assistant state superintendent of schools of South Dakota, has become city superintendent of schools at Waubay.

Prof. Chas. C. Sherrod, superintendent of the city schools of Morristown, East Tenn., has been recently appointed a member of the state board of education by Gov. Roberts.

Miss Theda Gildermeister of the Minnesota State Normal College, has been appointed as district superintendent of schools at Indianapolis, Ind. Miss Gildermeister will have special charge of the city normal school.

Mr. Clifton Wilkinson of Aurora, Mo., has been appointed superintendent of schools at Nevada, Mo.

Supt. T. M. Pearson has been re-elected at Marked Tree, Ark., at a salary of \$2,400. Supt. Pearson enters upon his fifth year at Marked Tree.

R. G. Jones, Cleveland's new superintendent of schools made his first public bow by saying "the humanitarian side of the schools will be my first concern."

Supt. Jesse H. Newlon goes from Lincoln, Neb., to Denver, Colo. He had a contract with the Lincoln board for three years at a salary of \$5,500, \$6,000 and \$6,500. Denver offered \$8,000, \$9,000 and \$10,000. The Lincoln board released Newlon.

Mr. F. T. Vasey of Mason City, Ia., has been elected superintendent of schools at Virginia, Minn.

Dr. C. C. Kohl, formerly head of the teacher-training school at Toledo, O., has been appointed head of the history department in the state normal school, Bowling Green, O.

Superintendent M. K. Weber of the Asheville, Tenn., schools has resigned to take another position.

Mr. W. E. Elmer of Turner, Mont., has been elected superintendent of schools at Chinook, Mont.

Dr. Henry S. West has been elected superintendent of schools at Baltimore, Md.

Mr. Roscoe C. Hill, superintendent of schools at Colorado Springs, Colo., for the last five years, has resigned to take up his new duties as principal of the East Denver high school.

Miss Lida Lee Tall of Columbia University,

New York City, and formerly assistant superintendent of the Baltimore county schools, has been appointed principal of the Maryland State Normal school, Towson.

Prof. Frederick A. Nims of Tucson, Ariz., has been elected supervising principal of the public schools at Haddonfield, N. J., to succeed Mr. A. D. Hanson who resigned last spring.

Westfield, Mass., has re-elected Supt. Chester D. Stiles and has increased his salary to \$3,200.

Supt. John F. Gannon has been re-elected as head of the schools of Pittsfield, Mass., at a salary of \$5,000.

Mr. Clarence H. Dempsey of Haverhill, Mass., has been elected superintendent of schools at Milton, at a salary of \$4,800.

Mr. Milo B. Hillegas, state commissioner of education for Vermont since 1916, has resigned to accept a position in Columbia University.

Mr. Lyman B. Allen of the faculty of the state normal school, Salem, Mass., has resigned to accept a principalship at Framingham.

Mr. H. R. McVay has been elected superintendent of schools at Marion, O., to succeed Henry A. Hartman. Mr. Hartman has been appointed to fill the vacancy at Sidney.

Mr. D. E. Weidman of Montrose, Colo., has been elected superintendent of schools at Bellingham, Wash.

Dr. John L. Tildsley has been elected district superintendent of schools of New York City, to succeed Dr. Edgar D. Shimer, now associate superintendent.

Mr. E. T. Duffield of Ironwood, Mich., has been elected superintendent of schools at Virginia, Minn. He succeeds Dr. P. P. Colgrove, resigned.

Mr. W. W. Theisen, statistical assistant to the Wisconsin department of education, has become director of reference and research at Cleveland, O., at a salary of \$4,500.

Mr. Kenneth Jones has been appointed superintendent of schools at Wenona, Ill.

Mr. W. M. Smith, formerly superintendent of Marion county, Ore., has resigned to become assistant state superintendent of schools. Mr. Smith succeeds E. E. Carleton.

Mr. E. J. Arnold has been elected superintendent of the McArthur-Huntsville Centralized School at Jamestown, O., at a salary of \$2,200 a year.

One moment, please:—

What about the toilet seats in *your* schools?

How often do you inspect them, as to sanitation and general condition?

What sort of impression do they make?

These questions arise of themselves, whether you like it or not. They may be ignored for a time, but eventually they have to be answered.

WHALE-BONE-ITE seats furnish at least a part of the answer if, as the case is in so many schools, there has been lack of appreciation of the absolute necessity of the requirements of a sanitary, cleanable, long-wearing toilet seat.

WHALE-BONE-ITE is impervious without the cracks and checks which encourage vermin. Readily cleaned and made aseptic.

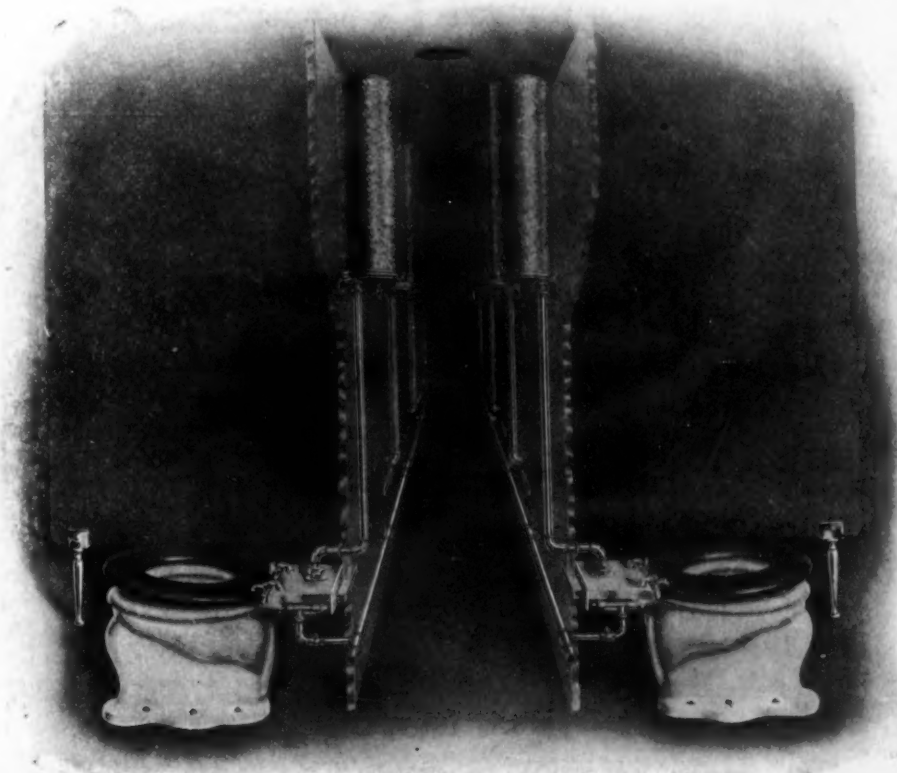
WHALE-BONE-ITE construction is responsible for the life-long wear of these seats, which speedily shows why it is poor economy and short-sighted buying to make price the chief consideration.

Don't ignore this question! It is important. Ask us for *proofs*.

Seat Dept.

THE BRUNSWICK-BALKE-COLLENDER CO.  
1623 SO. WABASH AVE. CHICAGO

## "NONCO" SUPERIORITY



"NONCO" Plumbing Fixtures are the result of over half a century of experience in manufacturing plumbing fixtures for schools. Our broad, liberal policy and honestly made products have served to establish "NONCO" Fixtures among the best schools of the country.

## "NONCO" Plumbing Fixtures

are scientifically designed — correctly built and are absolutely sanitary in every respect. They are perfect in every detail and are guaranteed to withstand the hard usage and abuse usually received from school children.

Write us today. Our experts are "always at your service." We know what is required and are prepared to supply you with the very best.

VENTILATED CLOSET STALLS WITH UTILITY CHAMBER

**N. O. NELSON MFG CO.** EDWARDSVILLE, ILLINOIS  
SAINT LOUIS, MISSOURI

BRANCHES { LOS ANGELES, CALIF.  
MEMPHIS, TENN.  
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HOUSTON, TEXAS  
LITTLE ROCK, ARK.

SALT LAKE CITY, UTAH  
BIRMINGHAM, ALABAMA







Model B Hoist with Overhead Crane (Manually Operated). One man can raise ashes from cellar to top of wagon without rehandling at grade.

### **Provide a Money-Saving Method of Ash Removal at Your School!**

**N**OW is the time to install a G&G Telescopic Hoist to take care of the ash and rubbish at your school.

Modern schools—all over the country—find that a G&G Hoist enables one or two men to take care of this work far *better, quicker and quieter* than five or six men under ordinary methods.

G&G Hoists are made in various models—*telescopic and non-telescopic—manual and electric*. Simple and sturdy in construction. Safe and dependable in operation. Can be operated in extremely cold weather as no parts are susceptible to freezing. Easily installed in old or new buildings where there is an opening preferably 4 feet square.

Open Hoistway protected by *automatically operating G&G Spring Guard Gates*. Sidewalk or grade doors *open and lock automatically—close and lock automatically* when Hoist is raised or lowered by telescoping handle.

*Let us show you how you can secure much better and quieter ash removal at your school—at less cost. Write us NOW, telling us height of lift; quantity of ashes to be removed and how often; and whether cans are to be hoisted to sidewalk or high enough to dump directly into wagon alongside of Hoistway.*

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**Telescopic Hoist**  
with Automatic Gear Shifting Brake Device and Silencer.

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**SONOTINT** especially adapted for classrooms because its velvety finish reflects light without glare.

**LIGNOPHOL** the modern hardener gives new life to old or new wooden floors. It prevents splintering and wear.

Lignopholed floors last longer and are dustless, smooth and sanitary with a pleasing decorative surface.

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WE GUARANTEE our Casmire Process to be just as represented, and we will sell you enough of our Casmire Process and our refinishing materials, loan you our tank, with the understanding that after you have cleaned 50 to 100 desks, if you are not entirely satisfied with the results you obtained, and our materials do not meet our claims, you may notify us, by wire, and we will give you shipping instructions on the unused portion, and we will not charge you one cent for the material used in cleaning the 50 to 100 desks.

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Mr. Jones, Chairman of the School Board, indulges in a little thinking and visualizing of what would happen if the city school, equipped with old fashioned, ladder-type fire escapes, should take fire—and of the greater opportunity for escape afforded by Standard Spiral Fire Escapes.

**F**IRE moves with the rapidity of lightning, almost instantly spreading its deadly presence throughout the school building, and leaving destruction and death in its path. Time is reckoned in seconds at such critical moments, and life hangs by a very slender thread.

Picture in your mind a typical school house equipped with the old type fire escape. When fire menaces, what chance have the panic-stricken children to escape?

**A STANDARD GRAVITY SPIRAL FIRE ESCAPE** under actual test, lowered two hundred children in a minute's time. The smallest and weakest child has the same opportunity of escaping from the burning building as its strong and robust playmate. They simply *slide* to safety.

Send us the floor heights of your school building and we will send you promptly an estimate of cost of a Standard Spiral Fire Escape. Act promptly—**TODAY.**

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Representatives in all principal cities.

### CLEVELAND RULES.

(Continued from Page 56)

(c) A substitute teacher will be credited with the holidays if he or she teaches the same position all of the school days of the week within which the holidays fall, provided the teacher for whom he or she substitutes is not entitled to credit for those holidays, and any substitute teacher who holds a position to which no regular teacher is assigned will be entitled to pay for the holidays the same as a regular teacher.

#### 9. Leave of Absence.

(a) Appointees of the superintendent of schools will receive pay for such time as they will be absent from duty on account of personal illness, or quarantine, for a period not exceeding ten days in any school year.

(b) They will receive pay for leaves of absence to attend the funeral of an immediate relative, or anyone who has virtually held the position of parent or guardian; such leaves will not exceed three days, the same to be deducted from the ten days heretofore mentioned.

(c) Leaves of absence may be granted by the superintendent to such appointees for the purpose of visiting other schools or attending to school business, without loss of pay, and this time shall not be deducted from the ten days mentioned. When such special leaves of absence to visit schools, necessitates the employment of substitute teachers, such leaves must be granted in writing by the superintendent, stating the object for which they are granted and the length of time.

(d) The superintendent may grant leave of absence, without pay for professional study. On filing with the superintendent satisfactory evidence as to the character and extent of such study, the time devoted by the teacher to this study may, with the approval of the superintendent, be credited to the teacher as experience for the purpose of determining the teacher's salary advancement under the schedule applying.

#### 10. Certificates.

Teachers may receive pay for such services only as are covered by certificate or certificates that they hold.

#### 11. Separate Appointment for Service in the Division of Educational Extension.

For services in the Division of Educational Extension, regular teachers must have a separate appointment by the superintendent confirmed by the board of education.

#### 12. Private Tutoring.

(a) Teachers engaged in private tutoring file at once with the superintendent a statement indicating the kind and amount of work undertaken.

(b) No teacher may tutor for pay a pupil in his or her class, or whose advancement in the grade is dependent wholly or in part upon his or her recommendation; nor shall a teacher tutor for pay any pupil attending public school except upon the request of the parent, and with the approval of the principal of such school. Assistant superintendents, supervisors, and principals may not give lessons for pay to teachers or principals whose rating is dependent wholly or in part upon the judgment of such assistant superintendents, supervisors or principals.

#### 13. Marriage.

In itself the marital relations of a teacher of either sex will not be treated as a bar to regular appointment or to continuance in regular service.

#### 14. Citizenship.

No one will be appointed or assigned to any position as a teacher who is not a citizen of the United States of America, or a citizen of a country which is maintaining friendly diplomatic relations with the United States.

#### III. Salaries for the Superintendent's Staff:

1. Salaries of the following will be as recommended by the superintendent of schools and approved by the board of education:

(a) The deputy superintendent.

(b) All assistant superintendents.

(c) The directors of the Department of Reference and Research, housing equipment and supplies, attendance, census and vocational guidance.

(d) All assistants (not clerical) to the above directors.

(e) The principal of the normal school and dean and assistant dean of the school of education.

(f) Such other educational appointees serving in the superintendent's staff as are not appointed to service under any schedule.

IV. Educational Qualifications: 1. "Standard educational qualifications" as the term is used in these schedules, are to be understood as follows:

a. Under the schedule for elementary teachers, this term means two years beyond a four-year high school course, equivalent to that furnished by the Cleveland Senior High and Normal Schools.

b. Under the schedule for junior high school teachers, this term means three years of approved education beyond a four-year high school course, or one year's education beyond the standard requirement for elementary teachers.

c. Under the schedule for senior high school teachers, the term means four years of approved education beyond a four-year high school course, or the equivalent of a full standard college course.

2. "Standard educational qualifications" for teachers in the Cleveland School of Education, are four years of education beyond a four-year high school course, including professional education especially preparing for such service as is required in this school.

3. In the case of teachers of subjects other than academic, practical, or "trade" experience, may be accepted in the ratio of two years of such experience to one year of education; provided, however, that under no schedule will the maximum of such "equivalents" exceed one year less than the number of years beyond high school required as "standard" by the schedule in question.

4. "Standard educational qualifications" for principals, supervisors and assistant supervisors, are the same as required of teachers working under corresponding schedules. The educational qualifications of the elementary teachers' schedule apply to all supervisors and assistant supervisors.

In practice, only those with at least one year's



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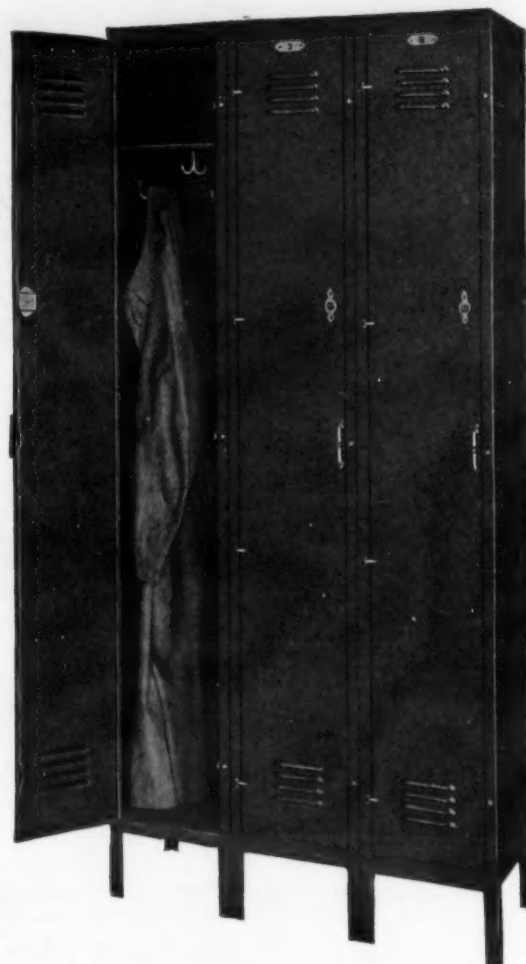
Pupils are quick to notice little differences that make one school more desirable than another. The morale of the school whose equipment is the best is sure to be the highest.

Install Durand Steel Lockers and your pupils will not only be proud of them, but will become more orderly and more respectful of property rights.

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excess educational qualifications that is, college graduates, are to be considered eligible for appointment to junior high school principalships. And strong preference is to be given to those having educational qualifications beyond "standard" in making appointments to any principalships.

5. It is understood that in all salary schedules, only such educational qualifications can be credited as can be fairly assumed to fit the teacher for the type of work that he is to do. For example, no credit can be given for technical education in preparation for professions other than teaching—as law, medicine, dentistry, the ministry—unless such technical education is required in the instruction that the teacher is called upon to give.

6. Educational qualifications are to be determined solely upon their merits without regard to teaching ability, known or assumed, of the teacher concerned.

7. In every case the extent, the character and quality of education is subject to determination by the city board of examiners.

VI. *Application of schedules and educational Qualifications to Teachers Now in Service:* 1. All teachers who, on June 18, 1920, will have been regularly employed in the Cleveland schools under any of these teachers' schedules for a period exceeding two years, immediately preceding the above date, for the purpose of the administration of these schedules will be considered to have an education not less than that required by the "standard" educational qualifications of the schedule for elementary teachers.

2. Any teacher who, on June 18, 1920, will have served as a regularly appointed teacher in the Cleveland schools for not more than two years immediately preceding the above date, and who shall be appointed for service to begin under the elementary schedule after the close of the current school year, will have his, or her, educational qualifications rated strictly on their merits. Any such teacher whose educational qualifications are below the "standard," may if continued in the service, advance in accordance with the schedule to a maximum salary of \$2,280

only. Advancement beyond this maximum will be dependent upon such teacher bringing his or her, educational qualifications up to the standard.

3. Teachers employed under the Junior High School schedule, whose educational qualifications actually fall below the standard qualifications of the schedule, may if continued in the service, advance in accordance with the schedule, to a maximum salary of \$2,565 only. Advancement beyond the maximum will be dependent upon such teachers bringing his, or her, educational qualifications up to the standard of the schedule.

4. All regular seventh and eighth grade classroom positions, wherever located, will, from September 1, 1920, be rated in all respects as Junior High School positions, and be subject to all conditions and requirements respecting services and salary schedule.

5. Teachers who, on June 18, 1920, will have been regularly employed in the schools under the Senior High School schedule, for a period exceeding two years immediately preceding the above date, will for the purpose of the administration of the schedule, be considered to have an education not less than that required by the "Standard" educational qualifications of the Senior High School.

Any teacher who, on August 31, 1920, will have served for not more than two years immediately preceding the above date, and who is appointed for service to begin under the Senior High School schedule, after this year will have his, or her, educational qualifications rated strictly on their merits. Any such teacher whose educational qualifications are below the "standard" may, if continued in the service, advance in accordance with the schedule to a maximum salary of \$2,850 only. Advancement beyond this maximum, will be dependent upon such teacher's bringing the educational qualifications up to standard.

7. Any teacher employed under the schedule for the School of Education whose educational qualifications are below the standard may, if continued in the service, advance automatically to a maximum of \$3,150 only.

8. Principals, supervisors and assistant supervisors, serving as such under regular appointment at the time of the adoption of these schedules, who is reappointed for service under any one of these schedules for the year 1920-21, will be considered to have an education at least equivalent to the "standard qualifications" of the schedule under which service is to be rendered.

### *Modifications and Special Applications of Schedules:*

Two years' experience, or an equivalent period of education beyond the "standard," are required as a condition of appointment under the schedule for the School of Education.

During the three-year probationary period, annual reappointment, with or without salary advancement, will depend entirely upon the recommendation of the superintendent, subject to the approval of the board.

c. Whatever the credit for experience allowed when a teacher enters the system and whatever the initial salary fixed at that time, which will not be below the minimum of the schedule, such credit and such salary stands as final, subject to adjustment upon the recommendation of the superintendent approved by the board.

VII. *Transferring Teachers from a Lower to a Higher Schedule:* 1. Transfers from a lower to a higher schedule will be made, as a rule, at the beginning of a school year or of a semester. Only when it will obviously serve the best interests of the schools, are such transfers to be made during a semester.

2. In the case of a transfer of a teacher to a schedule with a "standard" educational qualification in advance of that possessed by the teacher, such teacher must serve for one year, or for the unexpired part of the year in which the transfer is made, at the salary to which the teacher is entitled under the lower schedule from which the transfer was made.

3. In case of a transfer to a higher schedule, a teacher with educational qualifications equaling or exceeding the "standard" requirements of the higher schedule, the initial salary may be fixed, subject to the condition, modifications of

(Concluded on Page 96)

## You Can't Go Wrong in Laboratory Equipment When You Choose Kewaunee



Biology Laboratory Table No. 1000 accommodates two students. In many eastern institutions this style of table is being adopted exclusively for biological and physiological laboratories.



Students' Biology Laboratory Table No. 1006 is adapted to laboratories where the sections are few. This is ideal for schools where a complete work table is required.

School executives will make no mistake in deciding upon Kewaunee Laboratory Furniture for their new equipment this season.

For a great many years Kewaunee furniture has occupied a pre-eminent position in educational circles, and it has been our privilege to equip schools in practically every section of the United States.

The correct manufacture of modern laboratory furniture requires an exactness and special attention to detail that cannot be performed by untrained or inexperienced workmen.

Our years of experience devoted exclusively to the production of laboratory furniture, our complete factory equipment of modern cabinet-making machinery, with skilled cabinet makers trained in this special work, our extensive floor space and vast dry-kiln and tempering-room capacity, enable us to extend intelligent service and to supply laboratory furniture of the very best type of construction, of quality and adaptability.

We are always glad to receive letters of inquiry from school officials interested in discussing their needs.

Address all inquiries to the factory at Kewaunee.

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PEDESTAL  
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A Movable and Adjustable Duplex Seating Equipment FOR ALL SCHOOLS



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**EVERYTHING** that goes into the construction of Thompson Chair-Desks is designed either (1) to make these chairs last more years without wearing out, or (2) to give the user more extended service and comfort during EVERY ONE OF THOSE YEARS.

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Unbreakable,  
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Note the solid  
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port, which cannot  
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or break.



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Indestructible Pressed Steel Combination Desks,  
Stationary and Adjustable Desk and Chair Sets,  
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## Princess Movable Chair Desk

The frame is made of structural steel with welded joints that are  
guaranteed never to separate.

As Durable as a Stationary Steel Desk.

It can be shipped K. D. to save freight on long hauls.  
Price little more than cheapest cast iron desks, but less than  
wooden chair desks.  
Samples sent to interested parties.

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# THE HUDSON STUDY DESK



Patent applied for

Why have the top of a school desk adjust and not the seat?

We contend that by adjusting the desk only the correct posture cannot be obtained if the seat does not adjust — and the back too. The Hudson seat adjusts three inches (the top five inches) in the Large size and proportionately in the Medium and Small sizes. Besides the top adjusts to any position and the back adjusts vertically.



Patent applied for

## NEW JERSEY SCHOOL FURNITURE CO.

TRENTON

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NEW JERSEY

The oldest established school furniture factory in the country. Now 50 years.

### A STANDARDIZED BUDGET.

(Concluded from Page 35)

ner of preparing and presenting a budget will insure the basic purposes of a budget:

1. To secure adequate funds.
2. To prevent possible waste.
3. To eliminate all unnecessary expenditures.

The superintendent and his staff first of all determine the educational policy for the succeeding year, planning carefully any new departures. With this as a basis the needs of the various activities are determined, paying careful attention to (1) past experience and (2) using the results of cost accounting. Any unusual increases in different items are carefully analyzed and explained.

Possible waste is prevented by having the director of educational expenditures review all departmental estimates from the standpoint of (1) policy and (2) standard supplies and equipment. In this review he uses the material prepared from past expenditures. Upon the basis of his studies these estimates are revised to consistency with the general policy. He follows thru after the appropriations have been secured and must be assured of the necessity of all expenditures before they are finally allowed.

Unnecessary expenditures are provided against in two ways, first, by having estimates classified as follows:

- (1) Absolutely essential.
- (2) Necessary.
- (3) Desirable.

As previously stated the second check is thru the director of educational expenditures.

In preparing the budget the absolutely essential supplies and equipment are allowed. If the sum total of these estimates is as large as may be reasonably requested of the city, the second and third items must be eliminated.

Past experience has shown that the absolutely essential and necessary expenditures are generally allowable but that the third group, the desirable, can be eliminated, in most instances, in the final preparation of the budget.

All of these estimates when finally brought together must form a balanced whole and if they fail to do so, the unusual items are again carefully analyzed with the aim of determining whether this deflection from normal is defensible and whether it will be productive of greater results.

#### Conclusions.

By adopting the foregoing standardized form of budget Detroit believes that it will secure:

1. A sensible arrangement of its appropriation requests.
2. A form in which these requests may be easily read, and with sufficient information to make them easily understood.
3. It will show the increases in requests together with the percentage increases, which, by checking with the growth of the system will determine the justice of the requests.
4. It is a procedure that follows national practice in its general outlines and will permit the making of comparisons with budget requests in other cities of similar size and conditions.
5. It is a big step in the direction of a unified standardized national system of school expenditures.
6. It will insure adequate funds and will prevent waste and unnecessary expenditures.

#### TEACHER TRAINING THRU SERVICE.

(Concluded from Page 26)

spirit. That is one of the marked characteristics of the professions; law, medicine, dentistry, all share their approved ideas as a profes-

sional obligation. To do this is not conceit nor vainglory; it is not boasting; it is the teacher attaining the elevated rank of benefactor, of him who gives his best and expects nothing in return.

Incidentally, the teacher who grows and gives in this spirit will be sure to receive much in return. Gratitude of other teachers, esteem, honor, better opportunities, increased pay, are accorded to such teachers even if we have not yet attained to any acknowledged valuation of such growth. No teacher who feels the impulse need refrain for fear of overstocking the market. Many teachers, with regret be it admitted, will not feel the impulse; many mere plodders and imitators can not respond; the few who can respond should do so.

The thing described as "growth thru service," is happening now, has happened in many cases, and will continue to happen, whether recognition be accorded to it or not. It is one of the delights of teaching, to learn more than you teach; hence the delight of learning will be sure to induce the process of growth. Our schemes of teacher rating, and our much vaunted plans for the improvement of teachers in service, should take this form of growth into account, should establish a quantitative and a qualitative standard of achievement, so as to rank growth thru service as one of the forms of improvement of teachers in service.

#### WHO BOSSES THE SCHOOL JANITOR?

(Continued from Page 32)

who is to be "boss." As has been clearly announced in your journal, time and again, the principal is under the jurisdiction of the superintendent of instruction. The janitor should be under the jurisdiction of the officer in control of the business or physical properties of the



# Schools When You Need Them



Overflow from regular class and assembly rooms are properly taken care of with Togan Factory-Built Schools. These buildings are made to meet immediate situations.

Togan Schools can be had in any size; they come complete, ready to erect—no delay. They are light

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MICHIGAN

school district. If discord arises in the school between the principal and the janitor, the superintendent and the business or building official should look into the case and determine which one is in the right and correct the one in error. An interlacing of the tail ends of departments can result in nothing but disorganization and confusion.

As a general proposition too much is expected of the janitor. The statement may seem to you absurd.

Generally, in past years, a man has been hired off the streets at a minimum salary and placed in a school building and told that he is the janitor of that building and to run the plant and further he is to do anything the principal requests.

#### Importance of the Janitor.

Neither the janitor so hired or the principal in charge, nine times out of ten, knows anything about the plant. The public expects ideal service. Impossible! the janitor and the principal have not been given a square deal. Can you expect a cheap man off the street to execute a perfect piece of work when he had had no previous training and is not acquainted with the proper use of tools given him to work with? No.

This country must wake up to this fact that the public school janitor is an important adjunct in promoting the health, comfort and well being of the pupil, that he must be of good moral character, endowed with intelligence, properly remunerated and intelligently and skillfully trained, that it is as necessary to have a training school for school janitors as it is to have a normal school for the training of school teachers. Equip the janitor with thoro training, cut out politics from the head of the in-

stitution and the principal will be delighted, in his confidence in the janitor and the question of "Who bosses the janitor?" will not arise in the schoolhouse.

This is our experience in St. Louis and all other cities could have the same thing if they but willed it.

#### FINING TEXTBOOKS.

(Concluded from Page 36)

Very poor books, with ragged cover, broken bindings, and soiled and missing leaves, are termed old and are placed in a class by themselves. This last class is the only one for which protective and easily changed coverings are not provided. These covers do much to prolong the lifetime of new, one-half year, one year, two-year, and three-year books.

#### SOME RECENT CHICAGO SCHOOLHOUSES.

(Concluded from Page 51)

stacks is readily exposed for cleaning and the entire tunnel can be washed and scrubbed or flushed with a hose. The arrangement removes all dust accumulation in horizontal pipes and permits of the most sanitary condition of the entire ventilating plant.

The building was completed and occupied for school purposes in September 1919, and cost approximately \$285,000, including the structure, equipment, yard improvements, etc., except the site.

#### Norwood Park Elementary School.

Norwood Park is a portion of the city of Chicago but is so isolated at a suburban station that it forms practically a small town of itself.

The central portion of this suburb is laid out with a large circle street with curved intersecting streets. The property owned by the Board of Education on which the Norwood Park School building is located is of a peculiar shield shape

and presented a very unique location for a school building requiring a special shaped building to fit the site.

This building is two stories high with pitched roof and contains fifteen classrooms, household-science room, manual training rooms, assembly hall seating 700, gymnasium, offices, etc.

This school is very much used as a community center and a great many activities are carried on in the building. The building cost approximately \$175,000.

#### CLEVELAND RULES.

(Concluded from Page 92)

the schedule for the school as it applies to individual teachers of this character, may be made upon recommendation of the superintendent, approved by the board.

**Miscellaneous Regulations:** 1. The reappointment by the superintendent and with the approval of the board, of anyone serving under any schedule, will carry with it the annual increase in salary designated by the schedule until the maximum is reached, provided that the final increase up to the maximum will be only the amount required to bring the salary up to such maximum, and provided further, that the reappointment of one who has served for less than one full semester at the time of reappointment will carry an increase only on recommendation of the superintendent approved by the board.

#### THE RUSSELL SAGE FOUNDATION.

(Continued from Page 44)

"western zeal for education" and lets it go at that.

Oklahoma City Times is frankly shocked at being rated thirty-sixth state in educational progress. "Increased interest in school matters must be aroused," it says.

The Wichita, Kansas, Eagle says:

"Every once in a while we are reminded of the fact that we have been fooling ourselves about our American public school system. We

(Concluded on Page 100)

## The Oil Stone Grinder

is the most modern tool for sharpening edge tools, machine knives, chisels, gouges, plane bits, etc. The Oliver Oilstone Grinder illustrated is installed in the Pattern Shop of the City Pattern Works, Detroit. It is equipped with two large oilstone wheels, one intended for rapid abrasion, the other for putting the smooth, keen edge on the tool. An emery cone for grinding gouges is located at one end of lower arbor with 10-inch general grinding wheel on opposite end. Machine shown is equipped with a Knife Grinding Attachment. The Oilstone Grinder is exceptionally well guarded—a characteristic of all Oliver Machines.

The Oliver Line includes such grinding machines as Grindstones, Tool Grinders, Oilstone Grinders, Knife Grinders, Saw Grinders, Wood Grinders.

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which is furnished with two Abernathy Rapid Acting Vises, and can be had with six drawers, four drawers, two drawers, or without drawers.

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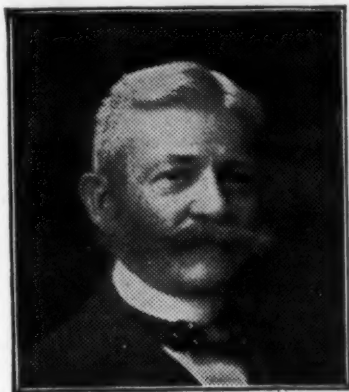
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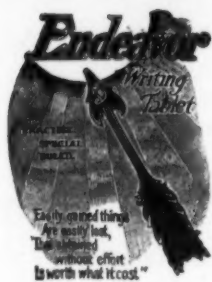
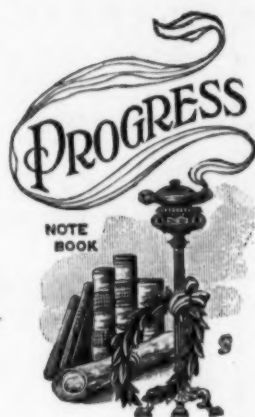
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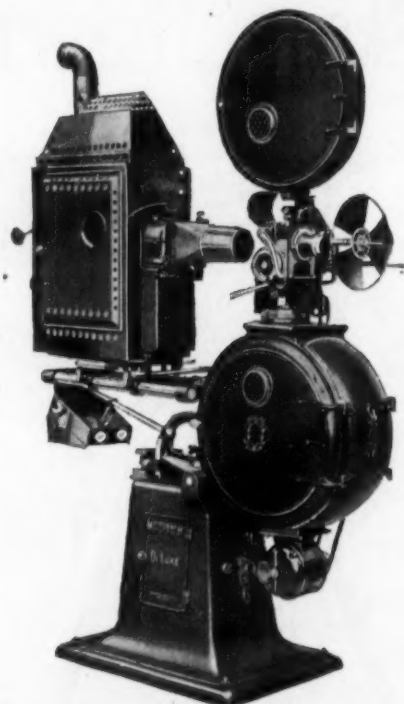
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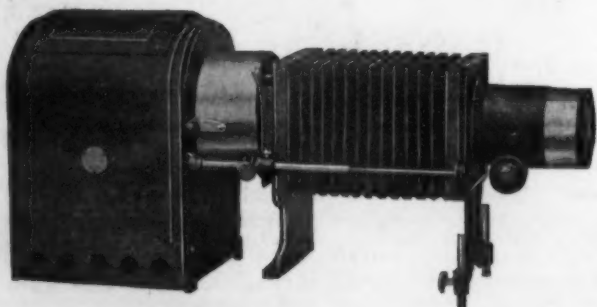
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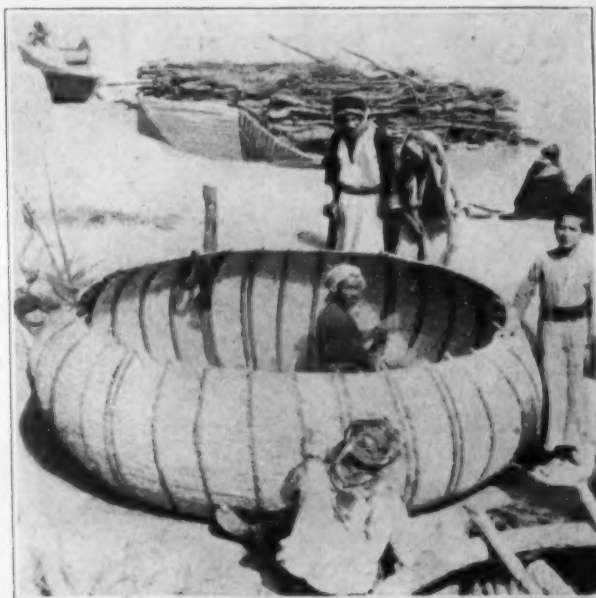
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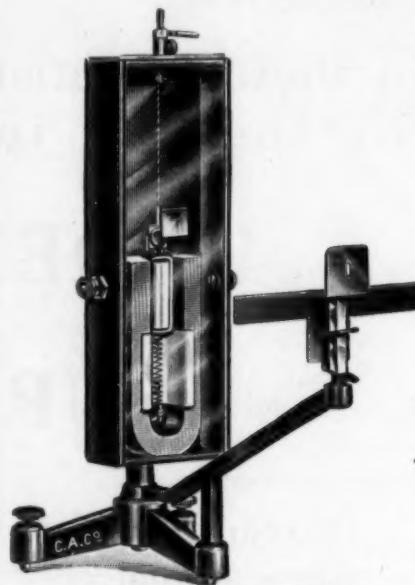
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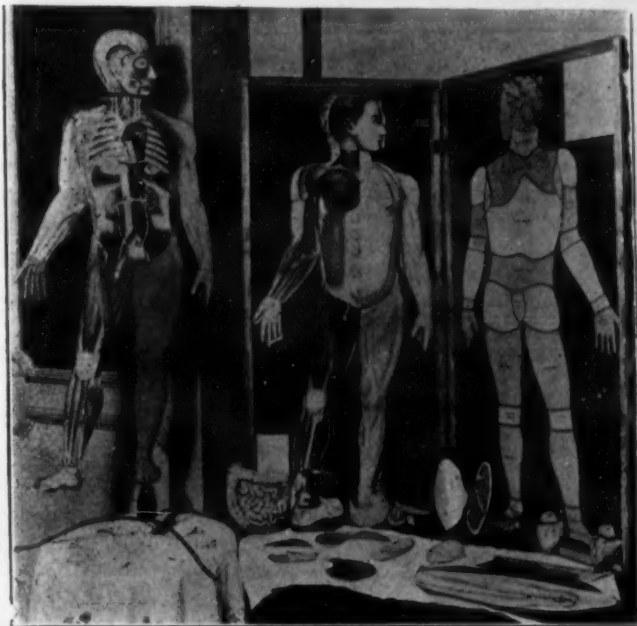
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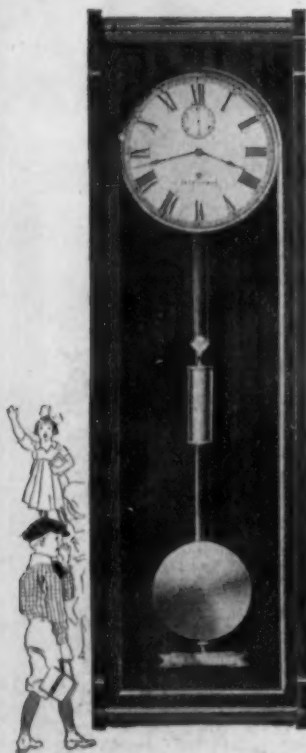
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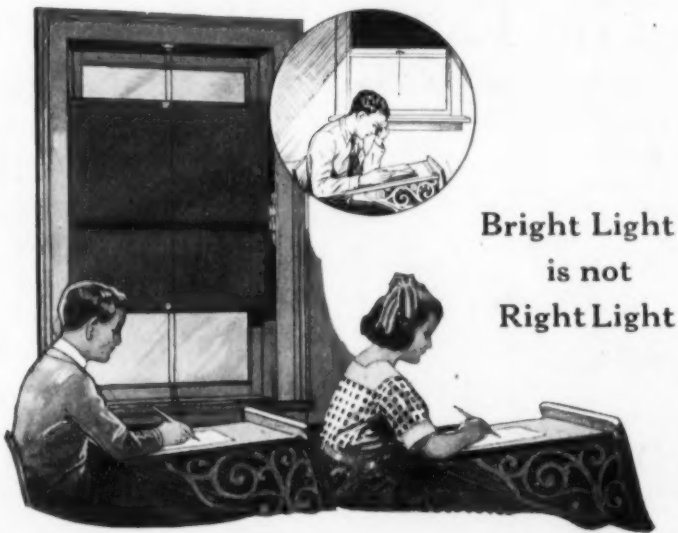


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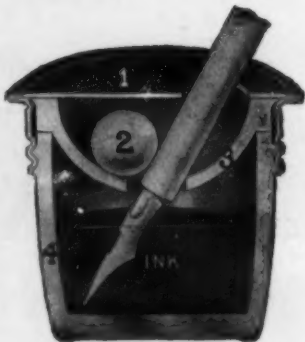
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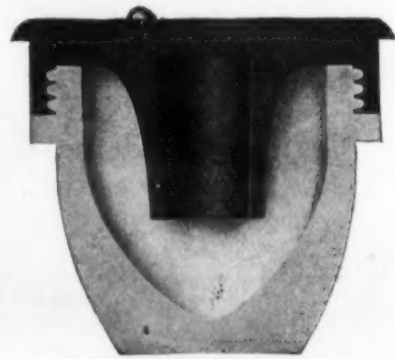
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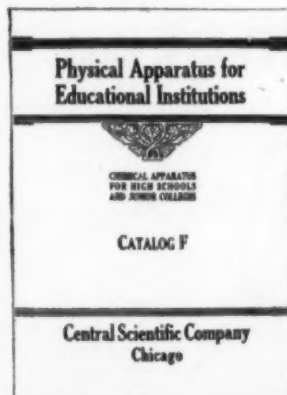
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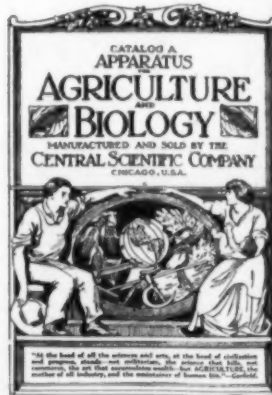
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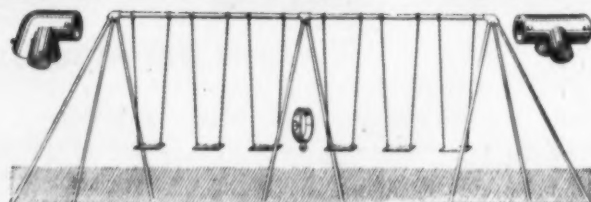


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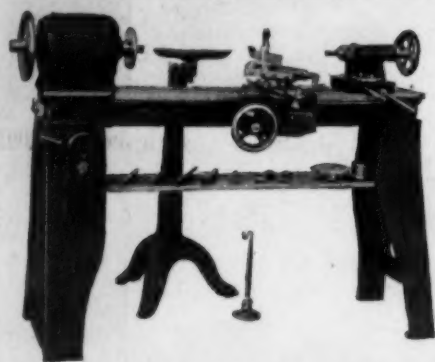
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G. C. Everett, Baton Rouge, La.  
Western School Supply Co., Boise, Idaho  
John W. Graham & Co., Spokane, Wash.  
Lowman & Hanford Co., Seattle, Wash.  
W. E. Finzer & Co., Portland, Ore.  
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**E. H. STAFFORD MFG. CO.**  
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School Desks, Lodge Furniture, Church  
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(Made entirely of steel)

No woods to gather germs and to warp.  
No iron to corrode; no springs to break.  
Can be adjusted to hold any size book.  
Can be raised and lowered at will.  
Can be tilted to any angle and pivoted to any position.

Circular and prices of our  
Stand and Wall-Bracket  
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## Steel Lockers

for Schools  
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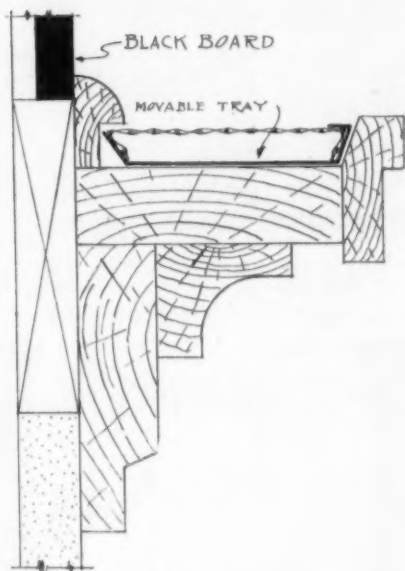
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**THE ARMOR CLAD MFG. CO.**  
CANTON, OHIO

Wood crayon trough designed to suit architect  
or builder, using

## DUDFIELD'S DUSTLESS TRAY AND WIRE SCREEN

Made in 4-ft. lengths.



For prices and information, write

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## AN ECONOMIC NECESSITY FOR YOUR CLASSROOMS

You'll need them often during the present school year and the price is so small that you'll never regret the expenditure.



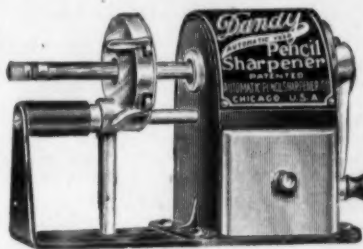
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The counterpart of the well known "Chicago" except that this machine will sharpen all sizes of pencils and crayons while the "Chicago" only sharpens standard size pencils. Stops cutting as soon as point is produced.



### THE "DEXTER"

The finest handfeed pencil sharpener made or possible to make. Sharpens all sizes of pencils and crayons. Has the automatic point adjuster enabling the operator to produce any point from blunt to fine. Heavily nickel plated thruout.



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All Its Name Implies.

The ideal machine for the school. All steel frame construction preventing tinkering and tampering. Automatic feed attachment preventing pencil waste. Sharpens all sizes of pencils and produces any point, blunt, medium or fine.

Other Models: Chicago, Junior, Wizard, Ideal, Climax 2

ALL QUALITY MACHINES

See your supply dealer or write to

**AUTOMATIC PENCIL SHARPENER CO.**  
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*The Problem of Safe and  
Sanitary Heating and  
Ventilation of School  
Wagons is Solved.*



## THE MILLER VEHICLE HEATER Does the Work

The above cut shows the Miller Vehicle Heater in use on a modern school wagon under actual winter conditions.

No stove to overturn, no gas or oil to explode, no smoke or poisonous gas to endure. Simply a hot air register in the floor flooding the whole inside of the wagon with warm, pure air drawn from outside.

Disease is now sweeping over the country endangering the lives of young and old alike. The epidemic of Spanish Influenza finds an inviting field for its deadly work in crowds, in damp, cold atmosphere, in poor ventilation.

The Miller Vehicle Heater, like mingled sunshine and fresh air, dispels dampness and disease, affords warmth and comfort, and renders safe and sanitary the journey to and from school.

Every parent has a moral right to demand and it is the sacred duty of school officers to supply Miller Vehicle Heaters for school wagons.

We manufacture and sell Heaters only and sell to wagon manufacturers, dealers and school authorities.

Send for Prices.

**MILLER VEHICLE HEATER CO.**  
Crawfordsville, Ind., U. S. A.



You receive full value  
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## STERLING

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Double Warp All Wool Bunting

A Flag of sterling  
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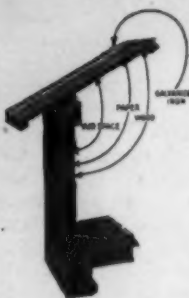
OUR PLANS  
APPROVED  
BY YOUR  
SCHOOL BOARD



AND MEET EVERY  
REQUIREMENT  
OF YOUR  
BUILDING CODE

The ARMSTRONG SECTIONAL SCHOOL BUILDINGS are complete in every detail, having double floors, double side walls and ceilings. With every modern convenience makes them the best Portable School Buildings on the market today. With the perfect lighting and ventilation, they are without equal. Our buildings can be taken down and moved to another location without mutilating in the least any of the parts. We can prove it. If you write us what you desire, we will send you full details. We are specialists in Sectional School construction.

THE ARMSTRONG COMPANY, P. O., 401, ITHACA, NEW YORK



## Bossert Schools

Are Warm in Winter and Cool in Summer

We are equipped to furnish any size building on short notice. Prices of same depend on requirements and State Laws—but in every case are the lowest for quality of material supplied. Remember, this is not a cut lumber proposition, and the cost of erecting is a very small item. While not essential, as any unskilled labor can do it, we will, if you desire, arrange to erect all buildings. Buildings can be taken down and re-erected any number of times without marring a single feature.

We have made portable school houses for other people for over 25 years. Now you can buy Bossert School Houses with all our new patents and improvements direct from us and save money for your school board.

Write us full requirements and we will send details of cost of building completely erected.

LOUIS BOSSERT & SONS, Inc.

Builders of School Houses for over 25 years.

1323 Grand Street

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## Protect the Health of the Children

If the children in the classroom should be bright and cheery the heat must be uniform and the ventilation just right.

Heating and Ventilation are two important factors in the school room. If the air in the schoolroom is foul and ventilation poor, disease is almost inevitable.

### OLD DOMINION PATENT HEATING AND VENTILATING SYSTEM

will keep the room fresh with pure air yet warm and comfortable.

No separate independent foul air ducts or flues made of brick or metal are required. It is easy to set up and regulate and will not clog with soot or rot out. Every part is combined and all stove and ventilating pipes up to five feet are furnished.

Our descriptive catalog gives full information and will be sent upon request.

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KENNEDY & PETERSON CONSTRUCTION CO. BUILDERS

THIS BUILDING ERECTED 1917

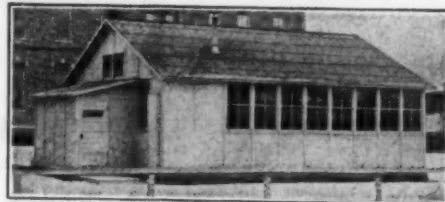
HONOR ROLLS—MEMORIAL TABLETS—IN BRONZE

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## Sectional, Portable School Houses

WHY NOT GET THE BEST?

Average Cost \$1000 per Room.

F. O. B. YOUR CITY.

School Boards in 35 states are using our houses. Let us refer you to customers in your state.

WE GUARANTEE OUR

## Portable Schools and Gymnasiums

to be dry, warm and sanitary, thoroughly insulated, well ventilated and with double walls. Sold in any size, open air and two rooms when desired.

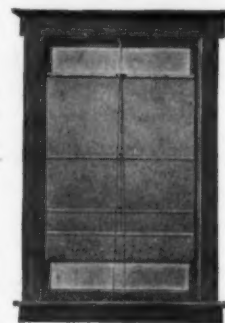
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AMERICAN PORTABLE  
HOUSE COMPANY

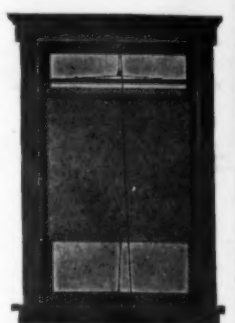
4098 Arcade Bldg., Seattle, Wash.



## 2 OF THE 15 VARIETIES



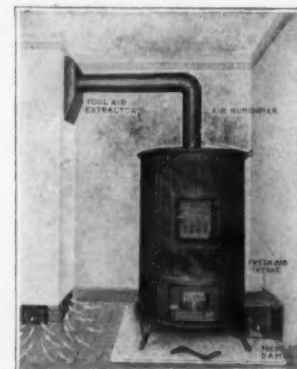
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DUCK  
SHADES



Write for Prices, Catalog and Free Sample

OLIVER C. STEELE MFG. CO.  
SPICELAND, IND.

## The Smith System of Heating and Ventilation



Especially Adapted to Portable  
Schools.

Gives the most perfect heat distribution and greatest amount of ventilation with the least amount of fuel.

More than 30,000 Schoolrooms are equipped with it.

In use in most of the Leading Cities.

Write for Catalog.

Smith System Heating Company

Minneapolis, Minn.

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## Bronze Tablets

In Honor of the Men Who Fought in the World War  
Bronze Memorial Tablets, etc.

All to Special Design. Designs and Estimates Free.  
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# Directory of Teachers' Agencies

## NATION-WIDE SEARCH FOR TEACHERS!

In order to meet the present emergency, we have again enlarged our facilities, and we are better prepared than ever before to render professional service to school boards seeking superintendents and to superintendents seeking teachers. With our affiliated Agencies we cover the entire country.

### FISK TEACHERS AGENCY

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**COLLEGE GRADUATES Recommended Exclusively**  
—except in vocational fields. No elementary school positions. Any subject from high school up. Leading bureau for teachers of Commercial, Industrial, and Physical Education. 19th year. Covers all states. Tell us your needs.

**SPECIALISTS' EDUCATIONAL BUREAU**

ROBERT A. GRANT, Pres.,  
Odeon Bldg., St. Louis, Mo.  
Branch Office: BERKELEY, CALIF.



TEACHERS, PRINCIPALS, SUPERINTENDENTS  
We Can Serve You Best. Write Us TODAY

**ROCKY MT. TEACHERS' AGENCY**  
EMPIRE BLDG., DENVER, COLO.

WM. RUFFER, A. M., Mgr.  
OUR SERVICE IS UNEXCELLED

Portland, Ore. 1312 Northwestern Bank Bldg., Frank K. Welles, Mgr. Los Angeles, Calif. 636 Chamber of Commerce, John C. Epperson, Mgr. Chicago, Ill.: Lytton Bldg., 14 E. Jackson Blvd., H. S. Stice, Mgr. Minneapolis, Minn.: 327 14th Ave., S. E., F. B. Reed, Mgr.

## CENTRAL EDUCATIONAL BUREAU

A RAPIDLY GROWING AGENCY IN THE CENTER OF THE EDUCATIONAL FIELD.

RECOMMENDS capable teachers for school and college positions. Considers official vacancies only. Schools wanting teachers and teachers wanting positions should write to us. WE CAN BRING YOU TOGETHER.

W. J. HAWKINS, Manager.

Metropolitan Bldg., St. Louis, Mo.

## NEW YORK WANTS YOU

On April 24 the legislature voted THIRTY MILLION DOLLARS for additions to the present salaries of school teachers, giving

### \$400 TO \$600 INCREASE

next year over the large salaries this year. This makes New York state salaries the largest in the world. New York wants 2,000 teachers from other states fit to earn them. Liberal recognition of credentials. Write at once.

SCHOOL BULLETIN AGENCY, - C. W. Bardeen, Syracuse, N. Y.

The day of the teacher is coming! Our purpose is to hasten its arrival.  
TEACHERS—SUPERINTENDENTS—PROFESSORS  
Have you registered with us? Have you listed your vacancies?  
Our Registration Bureau is ABSOLUTELY FREE.  
Let us help you:—Write us Wire us. Phone us. Come to see us. Our Motto: "Service First." Our address:  
SOUTHERN SCHOOL BOOK DEPOSITORY, INC.  
Atlanta, Georgia. Distributors of School and College text books.

## Missouri Valley Teachers' Agency

All communications answered the day received. Services free to school officials. Membership free to teachers. Wire or write for teachers or positions. O. F. Revercomb, Mgr.  
DENVER, COLORADO and NEW YORK LIFE BLDG., KANSAS CITY, MO.

## EDUCATORS-AGENCY A. P. GODDARD, Pres.

Y. M. C. A. Bldg., 19 S. LaSalle St., Chicago  
Personal Inspection of Instructors in the classroom one of the many distinguishing features of our service. Educators-Bulletin sent free to School Officials on request.

**Southern Teachers' Agency**  
W. H. JONES, Mgr.  
Columbia, S. C.  
Chattanooga, Tenn.  
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1. New System registering and nominating, doubling efficiency.  
2. No fees in advance; continuous enrollment.  
3. Specialists Department.  
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LOOKING FORWARD, telling about Southern opportunities, if requested.

**FISK TEACHERS' AGENCY** BIRMINGHAM OFFICE  
R. A. CLAYTON, Manager  
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## INTERSTATE TEACHERS' BUREAU

ATLANTA, GA.  
Organized 1901. CONSERVATIVE MANAGEMENT. INTELLIGENT EFFORT.  
ENJOYS CONFIDENCE OF INSTRUCTORS AND OFFICIALS.

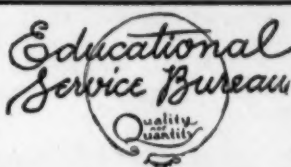
**PARKER**  
TEACHERS' AGENCY

Eighteen Years of Real Service to School Boards  
12 South Carroll Street  
MADISON, WISCONSIN

## WE SPECIALIZE IN BRAINS

personality and teaching power. OUR EIGHTH YEAR OF RECOMMENDING ONLY WHEN ASKED TO DO SO BY SUPERINTENDENTS OR SCHOOL OFFICIALS. More than two-thirds of all the Higher Institutions as well as the best Secondary schools in forty-four States and four foreign countries used our service the past season. Just moved into much larger offices equipped with every known device to fill vacancies from Kindergarten to University. A DISTINCTIVE SERVICE for Educators who appreciate ethical standards.

**THE WESTERN REFERENCE & BOND ASS'N, Inc.**  
Department of Education, 699 Journal Building, Kansas City, Mo.



Three Classes of Teachers Who Should Enroll in Our Agency

- 1—Those who desire a better locality.
  - 2—Those who want a better salary.
  - 3—Those who possess average or more than average ability.
- Write Manager C. E. White for booklet.  
EDUCATIONAL SERVICE BUREAU  
Handicraft Bldg., 89 So. Tenth St.  
Minneapolis, Minnesota

"THE AGENCY OF QUICK SERVICE AND EFFICIENCY"

## WESTERN TEACHERS' EXCHANGE

DENVER, COLORADO  
Gas & Electric Building

CHICAGO, ILLINOIS  
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The Plymouth Building

BERKELEY, CALIFORNIA  
Berkeley Bank Building

Free Enrollment—All Offices  
We Render Efficient Service To School Boards and Teachers  
The Only Agency That Maintains Educational Men Constantly in the Field

## The Pratt Teachers' Agency

No. 70 FIFTH AVENUE, NEW YORK

RECEIVES calls at all seasons for college and normal graduates, specialists, and other teachers in colleges, public and private schools, in all parts of the country. Advises parents about schools.

WM. O. PRATT, Manager

## NORTHERN TEACHERS' AGENCY 650 Northern Pacific Avenue

FARGO, N. D.

A demand for teachers in this northwest is constant. Very good wages are being offered. You should investigate. Write today for further information.

W. L. STOCKWELL, President  
8 years State Supt.

MRS. MATTIE M. DAVIS, Manager  
14 years County Supt.

**Teachers Wanted:** For High Schools—Salaries for men from \$1500 to \$2800; for women \$1000 to \$2200; Grade Teachers—Either Normal School or College Graduates \$100 to \$220 per month. We represent the best paying schools in the country who have long been our clients. Send for free booklet.  
THE ALBERT TEACHERS' AGENCY,  
25 E. Jackson Boulevard, Chicago. Other Offices—New York, Denver, Spokane.

## ALBANY TEACHERS' AGENCY, Inc. 81 Chapel Street

PROVIDES SCHOOLS AND COLLEGES WITH COMPETENT TEACHERS.  
ASSISTS TEACHERS IN SECURING POSITIONS  
HARLAN P. FRENCH, Pres. and Treas. W. W. ANDREWS, Secretary

## THE COLORADO TEACHERS' AGENCY

303-304 Kittredge Bldg., Denver, Colorado

Twenty-five years' successful service in behalf of teachers and school officials. We operate in all Western States. REGISTER NOW.  
FRED DICK, Manager. Co-operating Agencies—Harrisburg, Pa.; Atlanta, Ga.

## The Acme Teachers' Agency

Uses unique methods that eliminate trouble and worry in selecting teachers.  
Make your calls for teachers on its Manager, A. C. Whitehead, 1131 Healey Bldg., Atlanta, Ga.

## SCHERMERHORN TEACHERS' AGENCY Est. 1855

366 Fifth Ave., between 34th and 35th Streets, NEW YORK  
CHARLES W. MULFORD, Prop. A superior agency for superior people. We register only reliable candidates. Services free to school officials.

## Boyer's TEACHERS' Agency

10600 Euclid Avenue, Cleveland, Ohio

Write for Information S. R. BOYER, Manager Telephone: Garfield 9323

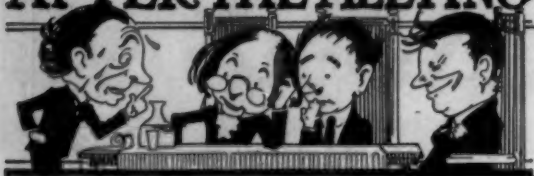
Established to Solve the "TEACHER PROBLEM"

## WANTED—POSITIONS FOR TEACHERS

Also teachers for positions. Teachers furnished free, full records of candidates. Write us your needs. OSWEGO TEACHERS' AGENCY, Box B, Oswego, N. Y.



## AFTER THE MEETING



### An Original Composition.

In a school of a good-sized town of the Middle West, the teacher had asked all the pupils to write a composition on Man. Of course it was expected that the compositions would be of a general nature as childish compositions go. This did not prove to be the general order. One was of a different variety.

The composition read like this:

"Man he smoke, he drink, he swear; man he no go to church; man he very bad, woman she angel."

Honk!

"Who was it that wrote the line: 'A little learning is a dangerous thing?'" asked the Old Fogey.

"Must have been some man who was trying to run an automobile for the first time," replied the Grouch.

### A Conclusion.

"What finishing school did Miss Bridge attend?"

"The School for Scandal," I should imagine." —Judge.

### Cause of Angry Waves.

Teacher: "This story tells us about the angry waves of the ocean. James, what makes the ocean get angry?"

James: "Because it has been crossed so often."

### Practical Answer.

Teacher: Now, if I paid one man two dollars a day for seven days, another three dollars and fifty cents for ten days, and another four dollars and seventy-five cents for six days—

Reddy Backrow (whose father belongs to the union): You'd have the durndest strike on your hands you ever saw, teacher.

### Time Is Ripe.

"Now, son, you're thru college. Get busy. The world is your oyster."

"Yes, dad."

"And the oyster season is now opening."

### Plausible.

Some one asked a scientific gentleman attached to one of Uncle Sam's bureaus at Washington whether, in his opinion, any of the so-called inanimate things can feel pain.

"There is nothing surer in the world," said he. "Have you never observed how a piano wails and groans when the average performer strikes it?"

### A High Compliment.

A certain Chicago teacher was assigned during the vacation school term to a class of colored children. She quickly won their affection, and her glorious blond hair and fair complexion, and the light colored summer frocks she wore won the admiration of her charges.

One day a very black member of the class told her how the pupils felt toward her.

"When we sees you sitting and telling us stories," he said, "We just can't help thinkin of a falah, white flower, stuck right in a dish of ripe olives."

### Not Chemical.

The professor had described the oxidizing effect of air upon various metals. In the quiz the students successfully described the red rust of iron, the green of copper, etc. Suddenly the professor spied an attentive lad and called: "Jones, what occurs when pure gold is left exposed in the air?"

Jones awakened out of his day dream said slowly: "It's swiped."

### Applied Arithmetic.

Schoolmistress—Well, what's the matter; has Johnny got the toothache?

Angry Mother—No, Johnny hain't got the toothache! He's suffering from your fool teaching. You told him he was to tell how long it would take him to eat twenty apples, if it took him one and a half minutes to eat one apple—and he's got stuck on the fifteenth!

### Prevocational.

"Elmer, I wish you'd give that young brother of mine a talking to. It's time he thought of choosing a career."

"Judging by the hours he keeps, I thought he was studying to be a night-watchman."—Life.

### School-Trustee English!

Some school trustees have received but little benefit from the education offered in the schools over which they preside. Witness this copy of a genuine letter from an Indiana rural director on the six months' school law:

"Dear Sir:

"In your letter of March 18th You Wont One hundred twenty days School. Five Schools are out and the other in Day or two Whe tauch 115 Day I ask Poupels and teachers that tha Wont 5 days again if you Want Me to Start and teach 120 days I try to get the teach Back But Som of the teachers or gon and In Maken the levy Makes the levy for this Turm of School and Whe Can Kep op this Way When whe got the levy Wait the Teachers git a Rais on her sellera and I am \$300 Shart if I got the State ait how you Whil Com Out Whit and When I git that Money bag Som asken me if I goden take it out the Special School fund I got no Money in that fund I Maid the Levy in September but the State Got the Levy down how Whil a faler kep up if that god no manney Last Years When I Got the Stait ait tha Rost Me a letter thar Wosent Nof Money to teach 120 day Stop Whit 113 day I got it Mix op that I dount no Whut to do.

"Answer by Return Mail.

"A Township Trustee."

### An Old One.

The rules under which this column are conducted prohibit the use of jokes older than one hundred years. The following which has come to us from a western schoolmaster is just within the age-limit. As nearly as we can determine, it appeared for the first time in print in the Education Journal in December, 1819.

"Johnny had misbehaved so badly that the teacher determined to whip him.

"John," she said severely, "Go out and cut a hickory switch."

"John returned after ten minutes.

"I could not find a hickory bush," he said, "but here is a stone you can throw at me."

Teacher: What is the greatest physical feat performed in the United States?

Boy: Wheeling, West Virginia.

### How a Teacher Became Rich.

He worked his way thru high school and by his superior ability won a year's scholarship in college. Here he worked for his meals and board.

Upon graduation, he took a teaching position in Anytonu and after five years reached the maximum salary of \$90. He took postgraduate work for an A. M. degree and was elected to a principalship at \$100 per month.

He has now retired at the age of 50, with a reputed fortune of \$85,000. This sum was accumulated by thrift, and perseverance, and the death of an aunt who willed the teacher \$84,999.62.



Mr. Principal—Miss Grammar and I spent a stupid evening at the teachers' meeting. There was no common point of interest.

Prof. Grouch—I see! Neither knew any fellow teachers in the other's school.

## BUYERS' NEWS COLUMN

### AN EDUCATIONAL RECORD.

The Victor Talking Machine Company has issued a new double record in its educational series. It has been prepared especially to illustrate the range and quality of the music of the flute and of the bassoon. The selection for the flute solo is Krantz's "Whirlwind", a descriptive piece picturing a capricious whirlwind. Weber's Hungarian Fantasia is reproduced to show the beauty and variety of the bassoon as a solo instrument.

### NEW GENERAL MANAGER FOR IMPERIAL BRASS MFG. CO.

William A. Leonard of Chicago has been elected vice-president and general manager of the Imperial Brass Manufacturing Company of that city, well known makers of Imperial Oxy-acetylene welding equipment, Watrous plumbing supplies, and a general line of automobile accessories and brasswork.

Until recently Mr. Leonard was associated with Belding Brother & Company, of Chicago and New York as organization and sales promotion manager.

This election completes the sales organization of the Imperial Brass Manufacturing Company, which ranks as one of the leading brass manufacturing concerns of the Middle West.

### MR. CAMPBELL HEADS KEWAUNEE COMPANY.

Mr. C. G. Campbell, well known thruout the country as an expert in the manufacture and sale of laboratory furniture, has become a member of the board of directors and general manager of the Kewaunee Mfg. Company at Kewaunee, Wis.

The Kewaunee Company is one of the oldest manufacturers in the laboratory equipment line and enjoys a wide reputation for the excellence of its products.

Mr. Campbell is well known to school authorities because of his former activities as sales manager of the Kewaunee Company.

### A LABORATORY CATALOG.

Schaar & Company, Chicago, manufacturers and importers of scientific apparatus, have issued Catalog No. 4 of their latest laboratory apparatus and supplies.

The catalog contains 218 pages devoted to a large collection of scientific apparatus along the line of balances, weights, time measurements, gyroscopes, motion apparatus, water motors, column balancing apparatus, hygrometers, barometers, compasses, batteries, motors, projection lanterns, delinescopes, microscopes, magnifiers, and miscellaneous general scientific supplies. Each article described in the catalog is accompanied with price lists and specifications, together with adequate descriptions of the construction and use of the article.

Laboratory teachers and school officials who are interested in scientific supplies of any character should address the Schaar Company at 565 W. Jackson Blvd., Chicago, Ill.

### OFFER NEW MOLDING FLASKS.

The Oliver Machinery Company, Grand Rapids, Mich., has just placed on the market a new line of molding flasks. They are steel, of the self-releasing map type and represent an immense advance over the old-fashioned wood flasks.

For school shops they involve special teaching advantages in that they are tapered and have no troublesome locks and hinges. They are practically indestructible under ordinary conditions of wear.

### Surgical Wit.

She is a talkative young school teacher and he a laconic Hoosier surgeon. Recently when he operated on her, her chattering preceding the operation almost drove him mad.

The fourth day he dressed her wounds and made her comfortable. Then she began to chatter and asked him question after question, the last one being: "Doctor, how am I really now?"

"Oh, you're getting along splendidly," he retorted. "In fact, all the suffering you will now have to endure is just to keep quiet."—Indianapolis News.



# School Goods Directory

## ADJUSTABLE WINDOW SHADES

Oliver C. Steele Mfg. Co.  
L. O. Draper Shade Co.  
Aeroshade Company  
Athey Company

## AIR CONDITIONING APPARATUS

American Blower Co.  
Moline Heat

## ASH HOISTS

Gills & Geoghegan  
F. S. Payne Company

## AUDITORIUM SEATING

Peabody School Furniture Co.  
American Seating Co.  
N. J. School Furniture Co.  
Heywood Bros. & Wakefield Co.  
Empire Seating Co.  
Theo. Kundtz Co.

## BLACKBOARDS—COMPOSITION

N. Y. Silicate Book Slate Co.  
Beaver Board Companies  
E. W. A. Rowles Co.  
Weber Costello Co.

## BLACKBOARDS—NATURAL SLATE

Keenan Structural Slate Co.  
Penna. Struct. Slate Co.  
Natural Slate Blackboard Co.

## BOOK COVERS

Holden Patent Book Cover Co.

## BOOK PUBLISHERS

Edward E. Babb & Co.  
Gregg Publishing Company  
D. C. Heath & Co.  
Hinds, Hayden & Eldredge, Inc.  
Isaac Pitman & Sons  
Silver, Burdett & Co.  
American Book Co.  
A. K. Palmer Co.  
Ginn & Company  
Educational Publishing Company  
J. B. Lippincott Co.  
World Book Company  
Houghton, Mifflin Company

## BRUSHES

Theo. B. Robertson Products Co.

## BUILDING PRODUCTS

Asbesto-Crete Buildings Co.

## CAFETERIA EQUIPMENT

Albert Pick & Co.

## CHARTS

American Manikin Company  
Weber Costello Co.

## CHEMICAL CLOSETS

Chemical Toilet Corporation

## CLOCKS

Standard Electric Time Co.

## CRAYONS

Binney & Smith

American Crayon Co.

E. W. A. Rowles Co.

Weber Costello Co.

National Crayon Co.

## DESK SURFACING MACHINE

Wayvell, Chappell & Co.

## DESK RENOVATORS

National Wood Renovating Co.

## DICTIONARY STANDS

Union School Furnishing Co.

## DIPLOMAS

W. M. Welch Mfg. Co.

Metropolitan Supply Co.

Educational Supplies Co.

## DISINFECTANTS

Theo. B. Robertson Products Co.

## DOMESTIC SCIENCE EQUIPMENT

E. H. Sheldon & Co.

Kewaunee Mfg. Co.

Leonard Peterson & Co.

Federal Equipment Co.

Albert Pick & Co.

Mutschler Brothers Company

## DOOR CLOSERS

Norton Door Closer Co.

## DRAFTING ROOM FURNITURE

E. H. Sheldon & Co.

## DRAWING MATERIALS

Devoe & Reynolds

## DRINKING FOUNTAINS

L. Wolf Mfg. Co.

N. O. Nelson Mfg. Co.

Rundle-Spence Mfg. Co.

Imperial Brass Mfg. Co.

## DRINKING WATER STERILIZERS

R. U. V. Co. Inc., The

## DUPLICATORS

A. B. Dick Company

## EDUCATIONAL FILMS

Fitzpatrick & McElroy

## ERASERS

Weber Costello Co.

E. W. A. Rowles Company

## ERASER CLEANERS

Weber Costello Co.

## FIRE ESCAPES—SPIRAL

Dow Wire & Iron Works

Standard Conveyor Co.

## FIRE EXIT LATCHES

Vonnegut Hardware Co.

Sargent & Co.

F. F. Smith Hardware Company

Van Kannel Revolving Door Co.

## FIRE EXTINGUISHERS

Pyrene Manufacturing Co.

## FIRE PROOF DOORS

Dahlstrom Metallic Door Co.

Pyrene Manufacturing Co.

## FIRST AID CABINETS AND MATERIALS

Johnson & Johnson.

Pyrene Manufacturing Co.

## FIREPROOFING MATERIALS

Asbesto-Crete Buildings Co.

## FLAG POLES

Newark Steel Post Co.

N. O. Nelson Mfg. Co.

## FLAGS

Annin & Co.

John G. Dietz & Co.

## FOLDING PARTITIONS

Jas. G. Wilson Corp.

## FURNITURE

American Seating Co.

Peabody School Furniture Co.

N. J. School Furniture Co.

Heywood Bros. & Wakefield Co.

Columbia School Supply Co.

Empire Seating Co.

Theo. Kundtz Co.

Columbia School Equipment Works.

Kenney Bros. & Wolkins

E. W. A. Rowles Company

H. H. Stafford Mfg. Co.

Mutschler Brothers Company

W. M. Welch Mfg. Company

## GLOBES

Weber Costello Co.

A. J. Nystrom & Co.

## GRAPHOPHONES

Columbia Graphophone Co.

## GYMNASIUM APPARATUS

Fred Medart Mfg. Co.

Narragansett Machine Company

## HEATERS

Virginia School Supply Co.

## INK

E. W. A. Rowles Co.

Howard Chemical & Mfg. Company

## INK WELLS

John Kvale Company

U. S. Inkwell Co.

Kenney Bros. & Wolkins

## JANITORS' SUPPLIES

Theo. B. Robertson Products Co.

Albert Pick & Co.

## LABORATORY FURNITURE

Kewaunee Mfg. Co.

Leonard Peterson & Co.

E. H. Sheldon & Co.

## LABORATORY SUPPLIES

Central Scientific Co.

Chicago Apparatus Company

E. W. A. Rowles Company

## LANTERN SLIDES

McIntosh Stereopticon Co.

Keystone View Company

## LATCHES

Van Kannel Revolving Door Co.

## LIBRARY SHELVING

Durand Steel Locker Co.

## LIGHTING FIXTURES

Beardslee Chandler Mfg. Co.

## LIQUID FLOOR HARDENER

L. Sonneborn Sons

## LIQUID SOAP

Imperial Brass Mfg. Co.

Theo. B. Robertson Products Co.

## LOCKERS

Armor Clad Mfg. Company

Federal Steel Fixture Co.

Durand Steel Locker Co.

Fred Medart Mfg. Co.

Narragansett Machine Company

## LOCKS—KEYLESS

J. B. Miller Keyless Lock Co.

## MACHINERY

Oliver Machinery Co.

Amer. Wood Work. Mach. Co.

## MANIKINS

American Manikin Company

## MANUAL TRAINING EQUIPMENT

E. H. Sheldon & Co.

Kewaunee Mfg. Co.

Oliver Machinery Co.

Columbia School Supply Co.

## MAPS

Weber Costello Co.

A. J. Nystrom & Co.

## MEMORIAL TABLETS

John Williams, Inc.

Albert Russell & Sons Co.

## MICROSCOPES

Rausch & Lomb Optical Co.

Spencer Lens Company

## MIMEOGRAPHS

A. B. Dick Company

## MOTION PICTURE MACHINES

Enterprise Optical Mfg. Co.

Victor Animatograph Co.

Fitzpatrick & McElroy

## OFFICE EQUIPMENT

Mutschler Brothers Company

## PAINTS

The Hockaday Company

## PAPER FASTENERS

Greenfield Manufacturing Co., Inc.

## PAPER TOWELS

A. P. W. Paper Co.

Holden Patent Book Cover Co.

Theo. B. Robertson Products Co.

Northern Paper Mills

## PENCILS

Eberhard Faber

Jos. Dixon Crucible Co.

## PENS

Esterbrook Steel Pen Co.

Spencerian Pen Company

## PENCIL SHARPENERS

Automatic Pencil Sharpener Co.

## PIANOS

Jackson Piano Co.

Steger & Sons Piano Mfg. Co.

## PLAYER PIANOS

Steger & Sons Piano Mfg. Co.

## PLAYGROUND APPARATUS

Hill-Standard Co.

Fred Medart Mfg. Co.

Woodstock Mfg. Co., Inc.

## PLUMBING FIXTURES

L. Wolf Mfg. Co.

Rundle-Spence Mfg. Co.

N. O. Nelson Mfg. Co.

James B. Clow & Sons

Imperial Brass Mfg. Co.

Hoffmann & Billings Mfg. Co.

Brunswick-Balke-Collender Co.

## PORTABLE SCHOOLHOUSES

Alexander Lumber Company

Mershon & Morley

American Portable House Co.

The Armstrong Co.

Louis Bossert & Sons

## PRINTERS

W. B. Conkey Company

## PROGRAM CLOCKS

Standard Electric Time Co.

Landis Eng. & Mfg. Co.

Seth Thomas Clock Co.

Time-Systems Co.

## PROJECTION LANTERNS

Bausch & Lomb Opt. Co.

Enterprise Optical Mfg. Co.

Victor Animatograph Co.

Spencer Lens Co.

McIntosh Stereopticon Company

## PUBLISHERS

W. B. Conkey Company

## RECORD SYSTEMS

Educational Supplies Company

C. F. Williams & Sons, Inc.

Metropolitan Supply Co.

## SCALES

Chicago Scale Co.

Continental Scale Works

## SCENERY

Twin City Scenic Co.

## SCIENTIFIC APPARATUS

Chicago Apparatus Company

Central Scientific Company

E. W. A. Rowles Company

W. M. Welch Mfg. Company

## SHOWERS

Hoffmann & Billings Mfg. Co.

## SPRINKLER SYSTEMS

General Fire Extinguisher Co.

## SWEEEPING COMPOUNDS

Theo. B. Robertson Products Co.

## SWIMMING POOL SANITATION

R. U. V. Co. Inc., The

## TALKING MACHINES

Victor Talking Machine Co.

## TEMPERATURE REGULATION

Johnson Service Co.

## TOILET PAPER

A. P. W. Paper Co.





## This Responsibility is Yours

If fire started in one of your schools tomorrow would it be out before the fire department arrived or would the lives of several children be sacrificed because some one had shirked their responsibility?

The time to fight fire is before it starts by eliminating the causes and by having proper protection to put it out.

To do this is the duty and responsibility of every school board. With proper protection there can be no more tragedies like the Peabody or Collinwood fires. Any woman or young person can operate a Pyrene extinguisher. One should be in every class room and a Gardene extinguisher in every hallway.



Pyrene One Quart  
Pump Type  
Extinguisher

### PYRENE MANUFACTURING COMPANY, Inc.

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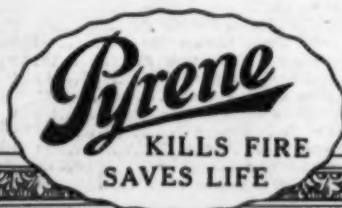
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Pyrene Manufacturing Co. of Canada, Ltd.

*Write for catalog of other fire appliances and our booklet—"Making Schools Safe From Fire". We will be glad to send upon request without obligation to you a representative to look over your school buildings and consult with you upon their fire protection requirements.*

Sold by school supply, hardware and electrical supply dealers and garages.



Gardene 2 1/2 Gallon  
Soda and Acid  
Extinguisher

# Von Duprin

## Self-Releasing Fire Exit Latches

### To Conserve Human Life

In building the United States Nitrate Plant at Muscle Shoals the engineers wished to throw every possible safeguard around the lives of the workers employed there, so the entire plant was equipped with Von Duprin Self-Releasing Fire Latches.

Yet, after all, is human life any more precious at Muscle Shoals than it is in your school buildings? Isn't it true that the school board which is keenly alive to its responsibilities will equip every school house with every possible means for conserving the lives of the pupils and teachers? Von Duprin latches greatly diminish the danger of fire-panic. Once the inmates reach the doors—safe exit is a positive certainty; the touch of hand or body on the cross bar instantly releases the door.

Let us send you catalog 12-C, containing complete details.



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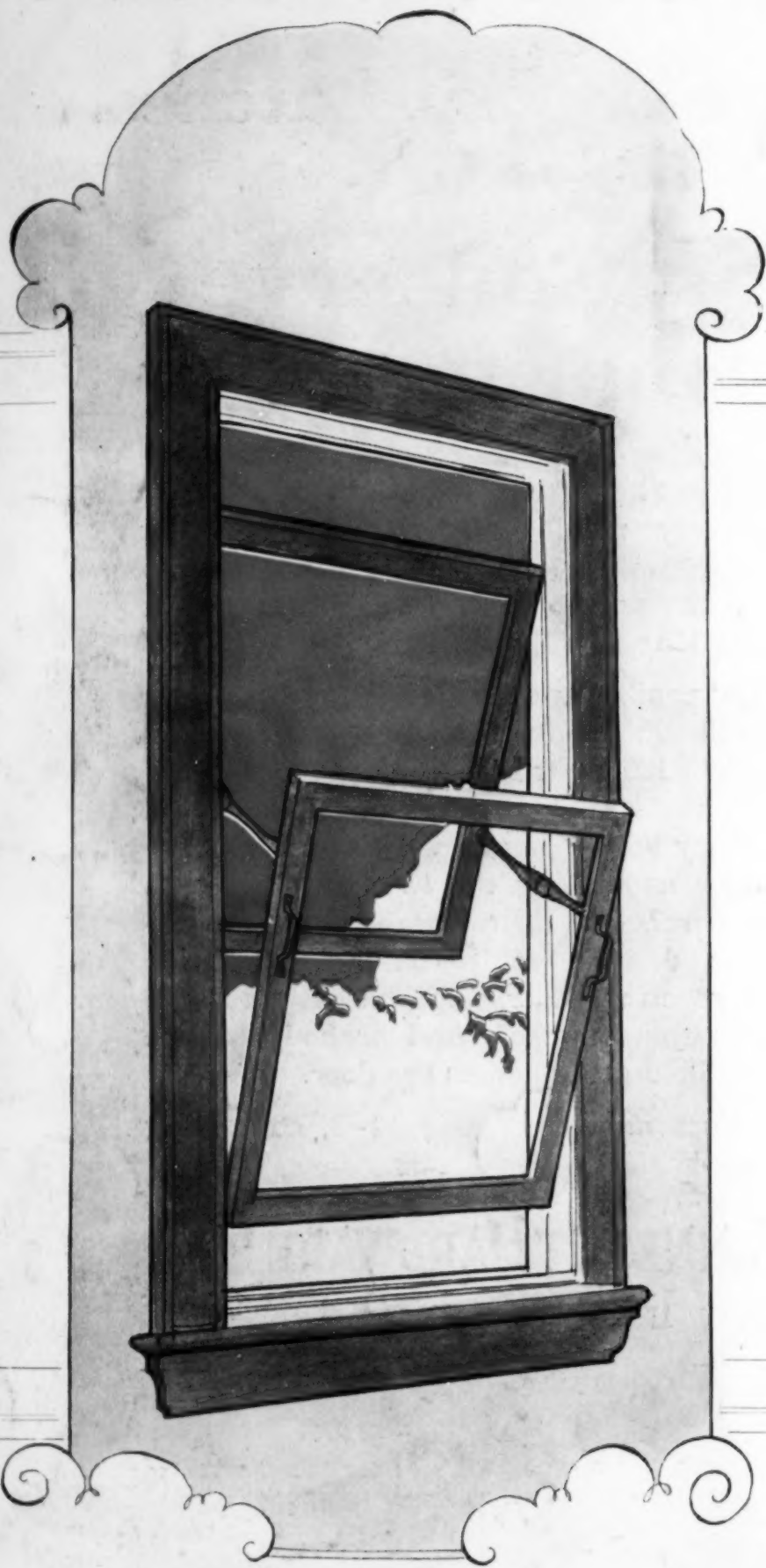
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